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FINAL

ALTURAS RESOURCE AREA

RESOURCE MANAGEMENT PLAN & ENVIRONMENTAL IMPACT STATEMENT

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

SUSANVILLE DISTRICT

October 1983

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United States Department of the Interior

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Dear Reviewer:

Enclosed for your review is the Final Environmental Impact Statement (FEIS) on the Alturas Resource Management Plan for public lands located in Lassen and Modoc Counties, California, within the Susanville BLM District. The EIS also fulfills the environmental assessment requirements for livestock grazing management and wilderness recommendations within the Planning Area.

The statement was prepared pursuant to Section 102(2)(C) of the National Environmental Policy Act of 1969. It is based on information from the Bureau of Land Management and other sources, including Federal, State, and local agencies, and interested private organizations and citizens. The Final EIS includes all comments received during the public review period, responses to each comment, and modifications to the text.

This FEIS contains BLM's Preferred Resource Management Plan. This plan is a refinement of the Preferred Alternative presented in the draft environmental impact statement published in April 1983. The major change from the DEIS is additional acreage recommended for wilderness designation and 9,300 acres dropped from consideration for land disposal. The Preferred Alternative is BLM's Proposed Action.

With the exception of wilderness recommendations, all parts of this plan may be protested. Protests should be sent to the Director, Department of the Interior, Bureau of Land Management, 18th and C Streets, N.W., Washington, D.C. 20240, prior to November DEC 03 1983 -- the end of the 30-day protest period -- and should include the following information:

- The name, mailing address, telephone number, and interest of the person filing the protest.
- A statement of the issue or issues being protested.
- A statement of the part or parts being protested.
- A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party or an indication of the date the issue or issues were discussed for the records.
- A short concise statement explaining why the BLM State Director's proposed decision (Preferred Alternative) is wrong.

At the end of the 30-day protest period, the Resource Management Plan, excluding any portions under protest, shall become final. Approval shall be withheld on any portion of the plan under protest until final action has been completed on such protest. The approval process and the final resource management plan will be published with the Record of Decision in December, 1983.

Sincerely yours,

C. Rex Cleary
District Manager

Enclosure

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Final Environmental Impact Statement

PROPOSED RESOURCE MANAGEMENT PLAN FOR THE ALTURAS RESOURCE AREA LASSEN AND MODOC COUNTIES, CALIFORNIA

Prepared by
Department of the Interior
Bureau of Land Management
Susanville District

The Bureau of Land Management proposes to implement a multiple use Resource Management Plan on 407,306 acres of public land in the Alturas Planning Area of northeastern California. The objective of the plan is to maintain or improve the overall condition of the public land resources while maintaining the social and economic stability of the local community.

The four alternative plans present a spread between development oriented and protection oriented resource allocations. Environmental consequences of the Proposed Alternative and each of the alternatives are described in an introductory summary and Chapter 4 of the EIS.

Ed Hastey
State Director
California State Office

For further information contact:

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Date on which comments are due: DEC 0 3 1983

Summary

SUMMARY

This EIS examines 5 alternatives:

I. Maximized Production
II. Balanced Use
III. Maximized Protection (includes Alternative IIIa - No Grazing)
IV. No Action
V. Proposed Alternative

For 11 Management Areas:

1. Tablelands
2. Rocky Prairie
3. Devils Garden
4. North Fork
5. Big Valley
6. Widow Peak
7. Little Valley
8. Pit River Canyon
9. Madeline
10. Mountain
11. East Warners

Dealing with 18 issues:

1. Recreation/OHV
2. Visual Resources
3. Cultural Resources
4. Fish and Wildlife
5. Wetland Riparian
6. Threatened & Endangered Species
7. Timber
8. Fuelwood
9. Soil and Water
10. Minerals/Energy
11. Socioeconomics
12. Fire Management
13. Lands
14. Transportation/Communication
15. Energy
16. Wilderness
17. ACECs
18. Range

Concerning multiple use resource management on 407,306 acres of public land within the Alturas Planning Area.

Eighteen issues were initially identified and used in determining the scope of the plan. Further analysis of each issue within the context of the resource base indicated that because of lack of conflicts, four issues could be dropped from issue status: visual resources, fire management, transportation/communication, and ACEC's. Although not specifically tracked through this EIS document, they are considered within the context of all resources during the analysis process.

TABLE S-1
Cumulative Summary of Alternatives

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
RANGE	Authorization of 48,554 livestock AUMs with additional authorization to use up to 32,111 suspended nonuse AUMs and additional forage, as determined to be available through monitoring of livestock forage supply. Allocation of 280 AUMs to support a portion of 150 wild horses and burros within the Emigrant Springs Herd Unit (Strip allotment). Burning and seed of 6,440 acres. Burning and release of 48,200 acres. Spraying and release of 1,000 acres. Construction of 29 miles of fence. Construction of 37 reservoirs. Development of 4 springs. Development of 1 well.	SAME AS ALTERNATIVE I, except authorization of 48,992 livestock AUMs with additional authorization to use up to 32,111 suspended nonuse AUMs and additional forage, as determined to be available through monitoring of livestock forage supply and wildlife habitat trend.	Authorization of 35,296 livestock AUMs after allocation to wildlife needs*. No restoration of suspended nonuse AUMs. Construction of 2.5 miles of fence. Construction of 10 reservoirs. Development of 1 well. Revision of 3 AMPs. Utilization light. Existing season of use. Alternative IIIa - No Grazing Elimination of livestock grazing.	Authorization of 49,783 livestock AUMs. Restoration of suspended nonuse AUMs within existing AMPs as forage is determined to be available in meeting AMP objectives. Burning and seed 3,000 acres. Burning and release 35,400 acres. Construction of 1 mile of fence. Development of 1 well. Revision of 4 AMPs. Utilization light to moderate. Heavy utilization allowed where individual grazing systems provide rest. Existing season of use.	SAME AS ALTERNATIVE II, except MA 11 would be managed under alternative III to authorize 160 livestock AUMs.

* There is no data available on AUMs required by wildlife. Calculation of livestock AUMs assumed a reduction from present utilization levels to a light (40%) utilization. This utilization level is assumed to ensure that all other multiple use needs are met.

TABLE S-1 (continued)
Cumulative Summary of Alternatives

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
RANGE (continued)	Juniper removal and seed of 150 acres Juniper removal of 500 acres. Development of 21 AMPs. Utilization heavy on individual pastures where grazing systems provide rest; moderate on remaining allotments. Extension of season of use 30 to 60 days in selected allotments.				
FISH AND WILDLIFE	No planned actions on antelope winter range, kidding grounds, sage grouse strutting grounds, or raptor habitat. Juniper thinning to improve browse on deer winter range.	No planned actions on antelope winter range and kidding grounds. Restrictions on disturbing activities on sage grouse strutting grounds. Exclusion of livestock from 20 miles of riparian habitat. Prescribed burning to improve browse in MAs 2, 7, and 10. Exclusion of livestock from 70 meadow habitats.	SAME AS ALTERNATIVE II, except: - Additional restrictions on potentially disturbing activities on sage grouse strutting grounds. - Additional prescribed burning to improve browse in MA 1. - Fencing of aspen to improve recruitment of Cold Spring and Tule Lake allotments. - Designation of buffer zones around raptor nest trees.	No planned actions on sage grouse strutting grounds or in antelope habitats. Maintenance of 2.5 miles of riparian habitat. Prescribed burning of 2,600 acres of decadent browse on deer winter range. No active management on 36.5 miles of riparian habitat.	SAME AS ALTERNATIVE II, except fencing of 50 acres of aspen to improve recruitment in Cold Spring and Tule Lake allotments.

TABLE S-1 (continued)
Cumulative Summary of Alternatives

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
FISH AND WILDLIFE (continued)		Protection of raptor nest sites. Juniper thinning to improve browse on deer winter range.			
FUELWOOD	Permitted harvest of juniper, oak, mahogany, and all commercial species.	Permitted harvest of juniper and mahogany. Designated fuelwood cutting areas to improve wildlife forage and browse. Fuelwood cutting generally restricted from National Register sites and districts. T&E plant populations, 350 acres of Sheep Valley, and 6,640 acres of Pit River Canyon wilderness.	SAME AS ALTERNATIVE II, except fuelwood cutting prohibited from all National Register sites and districts, T&E plant populations, 28,525 acres of designated wilderness areas, and 5,400 acres of an ACEC.	Juniper fuelwood permits issued on 125,043 acres upon demand.	SAME AS ALTERNATIVE II.
TIMBER	Intensive timber management on 5,034 acres of timber base lands. Reinstatement of 7 acres of commercial forest lands into timber base.	Intensive timber management of 4,797 acres of timber base lands with practices modified to provide protection to soils and streams; National Register sites and districts; raptor nest locations; and T&E plant populations.	Intensive timber management on 4,709 acres of timber base lands with practices modified to provide protection to soils and streams; National Register sites and districts; raptor nest locations; and T&E plant populations.	Intensive timber management on 5,124 acres of commercial timber base lands.	SAME AS ALTERNATIVE II, except MA 6 would be managed under Alternative I and MA 11 would be managed under Alternative III (5,027 acres).

TABLE S-1 (continued)
Cumulative Summary of Alternatives

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
CULTURAL	Protection of cultural resource sites that have National Register potential.	Protection of high quality cultural resource sites. Designation of 25 National Register sites and 10 National Register districts. Development of 5 Cultural Resource Management Plans. Fencing of 4 cultural sites along Horse Creek.	SAME AS ALTERNATIVE II.	Cultural resource values inventoried and protected by law.	SAME AS ALTERNATIVE II, except MA 11 to be managed under Alternative III.
T & E PLANTS	Minimal protection of sensitive plant species as required by Bureau policy.	Protection of sensitive plant species by fencing or buffer zones. Designation of sensitive plant populations in N. Ash Valley as a Research Natural Area.	SAME AS ALTERNATIVE II.	Protection of sensitive plant species in accordance with Bureau policy.	SAME AS ALTERNATIVE II, except MA 11 to be managed under Alternative III.
WATERSHED	Maintenance of municipal watershed conditions by rerouting roadways, and implementing an existing HMP.	Maintenance/improvement of critical watershed by placing restrictions on other resource activities. Improvement of Sheep Valley riparian and meadows habitats by managing 350 acres.	SAME AS ALTERNATIVE II, except management of the Sheep Valley ACEC would comprise 5,400 acres.	No change in municipal watershed.	SAME AS ALTERNATIVE II.

TABLE S-1 (continued)
Cumulative Summary of Alternatives

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
WILDERNESS	Wilderness study areas CA-020-103 Pit River Canyon and CA-020-211 Tule Mountain (28,525 acres) recommended as nonsuitable for wilderness designation.	Preservation of wilderness values on 6,640 acres within CA-020-103 Pit River Canyon.	Preservation of all wilderness values on 28,525 acres within CA-020-103 and CA-020-211.	No wilderness designation.	SAME AS ALTERNATIVE II.
MINERALS	Full allowance of mineral exploration and development throughout the Planning Area. Material sales (cinders and flat rocks) allowed throughout the Planning Area.	Full allowance of mineral exploration and development except within proposed wilderness. Restrict flat rock sales within cultural resource National Register area. Allow cinder use at established pits. Establishment of new cinder pits considered on a case-by-case basis.	Flat rock sales prohibited within the Planning Area. Cinder use confined to established pits.	Allowance of material sales at established pits.	SAME AS ALTERNATIVE II.
LANDS	Identification of small to moderate sized isolated parcels; 17,400 acres considered for potential disposal. Identification of 8,000 acres for exchange.	Identification of mostly small isolated parcels; 17,270 acres considered for potential disposal. Identification of 8,000 acres for exchange.	Identification of small isolated parcels; 6,310 acres considered for potential disposal.	Land tenure adjustments processed on a case-by-case basis as received.	SAME AS ALTERNATIVE II, except MA 11 to be managed under Alternative III. Identification of 12,440 acres of public land considered for potential disposal.

TABLE S-2
Cumulative Summary of Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
RANGE	Development of 21 AMPs and continued implementation of 10 existing AMPs to include: - Grazing systems to provide periodic rest, encouraging forage production and upward trend in ecological range condition. - Construction of 21 miles of fence to create pastures for grazing systems and improve livestock distribution. - Development of 37 reservoirs, four springs, and one well to provide additional water, improve livestock distribution and reduce livestock use of concentration areas to increase forage vigor and production and encourage upward trend in ecological range condition.	SAME AS ALTERNATIVE I, except: - Authorization of additional forage to livestock must consider wildlife habitat trends, reducing total allocation. - Size and configuration of vegetative treatments would be constrained by wildlife habitat needs, increasing the cost of treatment and reducing the effectiveness of treatment in meeting range objectives. - Land disposal would remove 1,940 AUMs from BLM authorization.	Development of 21 AMPs and continued implementation of 10 existing AMPs, same as Alternative I, with the exception of vegetative treatments. Areas open to recruitment of seedlings and growth of perennial grasses would improve in forage production and ecological range condition through improved management and reduction in livestock use. Areas controlled by excessive sagebrush, juniper, Sandberg's bluegrass or annual grasses would not be open to an increase in perennial grasses. These sites would have no significant change in species composition or forage production, resulting in no significant change in forage or ecological condition.	SAME AS ALTERNATIVE II for ten existing AMPs. Continuing present levels of livestock use, season of use, and light to moderate utilization would not improve livestock distribution outside of AMPs, causing a decline in forage and ecological range trend on loamy flats and riparian areas. Areas controlled by annual grasses, Sandberg's bluegrass, and dense stands of sagebrush, and juniper would remain in unsatisfactory forage condition or in fair to poor ecological range condition. Woodcutting would release understory forage. Fallen slash would protect and provide a better microenvironment for perennial grass plants and seedlings for several years while slash decomposes.	SAME AS ALTERNATIVE II, except land disposal would remove 1,687 AUMs from BLM authorization.

TABLE S-2 (continued)
Cumulative Summary of Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
RANGE (continued)	- Burning 54,640 acres and herbicide application on 1,000 acres to reduce or eliminate competition to seedings (6,440 acres) or native perennial grasses. This would substantially increase livestock forage and improve ecological range condition in areas with excessive sagebrush and juniper. - Removal of juniper on 150 acres to reduce or eliminate competition to understory grasses or seedings (50 acres), substantially increasing livestock forage in areas not suited to burning. Authorization of additional livestock to make use of excess forage would temper but not reverse the improvement in forage condition and ecological range condition.		Woodcutting and juniper thinning, for wildlife, would release understory forage. Fallen slash would protect and provide a better microenvironment for perennial grass plants and seedlings for several years while the slash decomposes. Land disposal would remove 1,054 AUMs from BLM authorization. Hard rock mineral exploration and development would cause livestock to move out of the immediate area of human activity. This would cause a slight shift in use patterns but no significant problems. Alternative IIIa - No Grazing Elimination of livestock grazing would cause existing perennial grass plants to improve in vigor and increase in basal area. Perennial grass seedling establishment would occur in open sites but not in areas of medusahead,		

TABLE S-2 (continued)
Cumulative Summary of Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
RANGE (continued)	Extended season of use and implementation of AMPs would provide a greater flexibility to range user operations. Areas controlled by annual grasses, Sandberg's bluegrass, dense stands of big sagebrush or juniper would not be significantly improved without vegetative treatments to reduce competition affecting perennial grasses. Woodcutting and juniper thinning would release understory forage. Fallen slash would protect and provide a better microenvironment for perennial grass plants and seedlings for several years while the slash decomposes. Land disposal would remove 1,836 AUMs from BLM authorization. Hard rock mineral exploration and development would cause livestock to move out of the immediate area of human activity. This would cause a slight		cheatgrass, Sandberg's bluegrass, and dense sagebrush and juniper stands. As perennial grasses increase so does forage condition and (generally) ecological range condition. Elimination of livestock grazing would cause a significant increase in fine fuels year round.		

TABLE S-2 (continued)
Cumulative Summary of Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
RANGE (continued)	shift in use pattern but have no significant problems.				
FISH AND WILDLIFE	Effects of range program: - Vegetative treatments of up to 55,640 acres to reduce or eliminate competition for seedings or native perennial grasses would be beneficial to wildlife where browse species are responsive to fire or where annual grasslands are converted to perennial grasses and shrubs. Burning in big sage habitats would reduce available browse where mountain mahogany and bitterbrush are included. Distribution of deer on winter range would shift and general herd condition would decline depending upon limiting factors on the particular winter range.	Effects of range program are the same as for Alternative I, except: - Wildlife impact into increased livestock grazing levels would insure that trend remains stable or improving in key habitats. - Exclusion of livestock from up to 20 miles of riparian habitat and 70 meadows would provide immediate positive benefits for small game, nongame, and fisheries populations. - Overall effects are slightly positive to deer winter range and very positive for meadow and riparian habitats.	Effects of the range program: - General reduction in livestock use would reduce competition for browse and improve cover and forage in all habitats. General population increases for most species. - Vegetative treatments would be aimed toward improving or maintaining wildlife habitats and maximize benefits to wildlife. - Overall effects on wildlife habitats and populations would be very positive. Effects of the fuelwood program are the same as for Alternative II. Effects of the minerals program are the same as for Alternative I.	Effects of the range program: - Continuation of livestock grazing at current levels with no vegetative treatments or additional facilities would allow slight decline in available browse and overall declining trend in meadow and riparian habitats. - Populations for most species would be static or slightly declining. No significant impacts from other programs.	SAME AS ALTERNATIVE II for all programs, except for lands. Effects of the lands program: - In MA 11 an additional 4,600 acres of important deer winter range would be retained in public ownership.

TABLE S-2 (continued)
Cumulative Summary of Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
FISH AND WILDLIFE (continued)	- Implementation of grazing systems providing rest would generally improve cover in upland habitats and stabilize meadow and riparian habitats. - Authorization of additional livestock to utilize excess forage made available through vegetative treatments would increase competition for browse and allow greater numbers of livestock to concentrate in riparian and meadow habitats. - Overall deer winter range would decline slightly through implementation of the range program in Alternative I. - Small game and nongame habitats would generally improve and increase these populations with the exception of sage grouse. Eradication of large areas of sagebrush would reduce nesting habitat for this species.	Effects of the lands program: - Disposal of 17,270 acres would retain antelope migration corridors, the sage grouse strutting ground, and the prairie falcon eyrie significantly reducing overall impacts to wildlife over Alternative I, but would dispose of an additional 3,760 acres of important deer winter range in MA 11. - Overall effects on deer winter range would be slightly negative. Effects of the timber program are the same as for Alternative I. Effects of the minerals program are the same as for Alternative I. Effects of the fuelwood program: - Limited harvest of oak and mahogany would insure adequate supplies of mast and browse on deer winter range.	Effects of the lands program: - Disposal of 2,760 acres of public lands would result in the loss of numerous small parcels of deer winter range much of which is already effected by other uses on adjacent private lands. Overall effect of the program is slightly negative. Effects of the wilderness program: - Designation of all acreage within two WSAs would provide additional protection of raptor and big game habitats in Pit River Canyon and reduce effects of motorized vehicle access on Tule Mountain. - Overall effect of the program is slightly positive to wildlife habitats.		

TABLE S-2 (continued)
Cumulative Summary of Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
FISH AND WILDLIFE (continued)	- Overall slightly negative effects to wildlife habitats with most negative effects occurring in available browse, meadow and riparian habitats. Effects of the fuelwood program: - Fuelwood harvest and juniper thinning would release browse and perennial grasses to the benefit of all species. Harvest of oak and mahogany upon demand would reduce mast and browse availability. Effects of the lands program: - Disposal of 17,400 acres of public lands would result in the following impacts: - Loss of one sage grouse strutting ground causing potential extirpation of that population.	- Harvest of juniper would release browse and perennial grasses and provide additional cover for small game. - Overall effect of the program is highly positive to wildlife habitats and populations. Effects of the wilderness program: - Designation of 6,740 acres as wilderness in Pit River Canyon would provide additional protection of raptor and big game habitats. - Non-designation of Tule Mountain would have no significant impact on wildlife habitats. - Overall effect of the program is slightly positive to wildlife habitats in the Pit River Canyon area.	<u>Alternative IIIa - No Grazing</u> Effects of the range program: - Removal of all livestock use from the public lands would result in large increases in cover and available forage for all species. Population increases for all species would be expected.		

TABLE S-2 (continued)
Cumulative Summary of Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
FISH AND WILDLIFE (continued)	- Loss of public lands in three constricted antelope migration routes causing potential for high antelope mortality during severe winters. - Loss of numerous small parcels of deer winter range much of which is already effected by rural subdivisions or surrounded by private lands. Overall effect should development occur on these parcels would alter deer distribution on winter range. - Loss of one prairie falcon eyrie on public lands which would probably not effect this cliff-dwelling species.				

TABLE S-2 (continued)
Cumulative Summary of Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
FISH AND WILDLIFE (continued)	Effects of the timber program: - Management for uneven age stands would maximize habitat values for big game and reduce habitat for old growth forest species. Effects of the minerals program: - Extensive mineral development is not anticipated. Surface disturbance from development such as cinder pits and open pit mining would completely remove wildlife habitat from localized areas. Minor negative effects on wildlife distribution would be site specific.				
FUELWOOD	Fuelwood availability on a sustained yield basis within vegetation treatment areas would be significantly decreased. Overall slight decrease in future yield of fuelwood availability.	SAME AS ALTERNATIVE I, except restricted fuelwood cutting from National Register sites and districts, T&E plant populations, and 350 acres of Sheep Valley would result in a slight decrease of available fuelwood.	SAME AS ALTERNATIVE II. Alternative IIIa - No Grazing No significant impacts.	No significant impacts.	SAME AS ALTERNATIVE II.

TABLE S-2 (continued)
Cumulative Summary of Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
TIMBER	Same as present management, except the seven acres reinstated to the base would produce 16 percent additional volume within the seven acres, attributed to intensive management practices.	Same as present management, except modified harvest on 18 acres of Pine Creek watershed and within a National Register district would result in a reduction in productivity of less than 500 board feet per year.	SAME AS ATLERNATIVE II, except withdrawal of 151 acres of commercial timber land in Tule Mountain Wilderness Area would reduce the annual allocated cut of the Planning Area by 16 MBF and reduce the per decade increase by 18 MBF to 602 MBF. Alternative IIIa - No Grazing Same as present management.	Intensive management practices would increase timber productivity on commercial timber lands by replacing over and under stocked, poorly growing stands with young, well stocked stands. Approximately 620 MBF per decade would be added to the allowable cut as a result of proposed management practices on 5,124 acres.	Intensive management practices would increase timber productivity on commercial timber lands by replacing over and under stocked, poorly growing stands with young, well stocked stands. Approximately 609 MBF per decade would be added to the allowable cut as a result of proposed management practices on 5,027 acres.
CULTURAL	Increased livestock use and vegetation treatments would significantly degrade cultural values, particularly around spring sources.	Increased livestock use and certain vegetation treatments would slightly degrade cultural values.	SAME AS ALTERNATIVE II, except cultural values would be less susceptible to disturbance as a result of decreased livestock use. Alternative IIIa - No Grazing Disturbance of cultural values from livestock trampling would be eliminated.	Slight disturbance to cultural values as a result of livestock trampling and OHV use.	SAME AS ALTERNATIVE II.
T & E PLANTS	Increased livestock use and fuelwood harvest would slightly disturb sensitive plant species.	No significant impacts	No significant impacts. Alternative IIIa - No Grazing No significant impacts.	Slight disturbance to sensitive plant species from livestock trampling and vehicular traffic.	No significant impacts.

TABLE S-2 (continued)
Cumulative Summary of Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
WATERSHED	Present conditions would decline with increased livestock grazing and existing OHV use.	Restrictions placed on livestock grazing and OHV use would result in a long-term improvement of watershed conditions.	SAME AS ALTERNATIVE II. Alternative IIIa - No Grazing SAME AS ALTERNATIVE II, except for area-wide improvement of soil and riparian areas.	Present conditions would decline with continued OHV and livestock use.	SAME AS ALTERNATIVE II.
WILDERNESS	Moderate adverse impacts to 28,525 acres of wilderness characteristics from continued OHV use and range management activities within WSAs CA-020-103 Pit River Canyon and CA-020-211 Tule Mountain.	Slight to moderate adverse impacts on 22,295 acres of undesignated WSAs from continued OHV use and range management activities.	No significant impacts. Alternative IIIa - No Grazing Enhancement of wilderness characteristics due to removal of nonconforming grazing use and associated management activities.	Slight reduction to wilderness values.	SAME AS ALTERNATIVE II.
MINERALS	Disposal of 17,400 acres of public lands would have an insignificant effect on mineral development due to the low mineral potential within the Planning Area. Mineral rights would be retained where significant mineral resources occur. 98.5 percent of the Planning Area open to mineral entry.	Disposal of 17,270 acres of public lands would have an insignificant effect on mineral development due to the low mineral potential within the Planning Area. Mineral rights would be retained where significant mineral resources occur.	Disposal of 6,310 acres of public lands would have an insignificant effect on mineral development due to the low mineral potential within the Planning Area. Mineral rights would be retained where significant mineral values occur.	No significant impacts.	SAME AS ALTERNATIVE II, except disposal acreage would be reduced to 12,440 resulting in an insignificant effect on mineral resources.

TABLE S-2 (continued)
Cumulative Summary of Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
MINERALS (continued)		Prohibition of mineral exploration or development within the designated wilderness area (6,640 acres). Insignificant effect to the mineral industry in the long-term due to the low potential. Flat rock collection within a 2,400 acre cultural area would be closed, resulting in a 25% decrease in flat rock material. 98 percent of Planning Area open to mineral entry.	Prohibition of mineral exploration or development within the designated wilderness areas (28,525 acres). Slight effect to the mineral industry in the long-term due to the low potential. Flat rock collection within a 2,400 acre cultural area would be closed, resulting in a 25% decrease in flat rock material. 95 percent of the Planning Area open to mineral entry. Alternative IIIa - No Grazing No significant impacts.		

TABLE S-3
Cumulative Summary of Socioeconomic Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
RANGE	Up to two percent increase in cattle numbers for Modoc/ Lassen Counties. Thirty-two permittees would be affected by the loss of grazing use of allotments through land disposal. Impacts would range from slight adverse effect to significant adverse effect.	A zero to two percent increase in cattle numbers for Modoc/Lassen Counties. Twenty-nine permittees would be affected by the loss of grazing use of allotments through land disposal. Impacts would range from slight adverse effect to significant adverse effect.	A one percent decrease in cattle numbers for Modoc/Lassen Counties. Thirteen permittees would be affected by the loss of grazing use of allotments through land disposal. Impacts would range from slight adverse effect to significant adverse effect. Alternative IIIa - No Grazing - Public lands play a very important role by providing spring range to local livestock operators. Removal of this critical link through selection of the no grazing alternative would severely reduce available spring forage for livestock. Without public range to move livestock onto, many operators would have to buy additional hay, not usually available at this time of year. In addition, these livestock would remain on home ranches	No significant impacts.	SAME AS ALTERNATIVE II, except land disposal would remove 1,687 AUMs from BLM authorization.

TABLE S-3 (continued)
Cumulative Summary of Socioeconomic Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
RANGE (continued)			delaying by one or more months the irrigation of hay meadows. This delay in hay production in the short (90 to 120 day) growing season would significantly reduce annual hay production affecting the amount of feed available through the following winter. Calf diseases would be significantly higher if cattle stayed on meadows. - Public lands used in the summer provide a major portion of livestock forage to many livestock operators. Removal of critical spring and/or summer forage on public range would force operators to make substantial adjustments in their operations and in some cases to go out of business. - Three percent decrease in cattle numbers in Modoc/Lassen Counties.		

TABLE S-3 (continued)
Cumulative Summary of Socioeconomic Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
RANGE (continued)			- In addition, there would be loss of use of adjacent private lands where livestock access is across public lands. The cost of fencing the public lands to prevent livestock access has not been estimated but is expected to be substantial and would add significantly to the operation costs of the adjacent private landowners who graze livestock. - The effect of no grazing would affect 99 permittees. Adverse impacts to permittees would range from slight to significant in proportion to the dependency of their operation on public lands.		
TIMBER	Disposal of 97 acres and reinstatement of 7 acres of timber base land would result in a decrease to 560 MBF of timber contributed to the economy per year.	Disposal of 327 acres of timber base land would result in a decrease to 534 MBF of timber contributed to the economy per year.	Disposal of 304 acres and withdrawal of 151 acres in the Tule Mountain WSA (timber base lands) would result in a decrease to 519 MBF of timber contributed to the economy per year.	570 MBF of timber would be contributed to the economy per year.	SAME AS ALTERNATIVE I.

TABLE S-3 (continued)
Cumulative Summary of Socioeconomic Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
TIMBER (continued)	Three jobs would be created or maintained. An additional 11 jobs would be provided through indirect employment. This would amount to less than 0.01% of the regional employment. Timber sale receipts would be $29,276.80 per year. Approximately $1,171.07 per year would be returned to the State of California. Revenue cost ratio of 1.5:1 would continue.	Three jobs would be created or maintained. An additional 11 jobs would be provided through indirect employment. This would amount to less than 0.01% of the regional employment. Timber sale receipts would be $27,917.52 per year. Approximately $1,116.70 per year would be returned to the State of California. Revenue cost ratio of 1.5:1 would continue.	Three jobs would be created or maintained. An additional 11 jobs would be provided through indirect employment. This would amount to less than 0.01% of the regional employment. Timber sale receipts would be $27,392.82 per year. Approximately $1,095.71 per year would be returned to the State of California. Revenue cost ratio of 1.5:1 would continue. Alternative IIIa - No Grazing Same as Alternative III.	Three jobs would be created or maintained. An additional 11 jobs would be provided through indirect employment. This would amount to less than 0.01% of the regional employment. Timber sale receipts would be $30,084.60 per year. Approximately $1,203.38 per year would be returned to the State of California. Revenue cost ratio of 1.5:1 would continue.	
LANDS[1/]	Disposal of 17,400 acres of public lands would result in a one-time increase in federal revenues in the range of $1,740,000 to $8,700,000.	Same as Alternative I, except disposal of 17,270 acres of public lands would result in a one-time increase in federal revenues in the range of $1,727,000 to $8,635,000.	Same as Alternative I, except disposal of 6,310 acres of public lands would result in a one-time increase in federal revenues in the range of $631,000 to $3,155,000.	Retention of isolated, and uneconomically managed public lands would result in further expenditure of federal revenues. Extensive coordination with private landowners, and improvements such as	Same as Alternative I, except disposal of 12,440 acres of public land would result in a one-time increase in federal revenues in the range of $1,244,000 to $6,220,000.

1/ The dollar figure for land disposal was based on land values that would range from $100 to $500 per acre depending on size, location, and topography characteristics of each parcel.

TABLE S-3 (continued)
Cumulative Summary of Socioeconomic Impacts

	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management	Preferred Alternative
LANDS (continued)	Disposal of the unmanageable tracts would have an unquantifiable monetary benefit to the government. These parcels would no longer require expenditure of funds for resource management or improvement. Disposal would also allow private landowners to incorporate the isolated tracts into existing grazing, agriculture and/or other uses currently developed on adjacent private lands. Private management and improvements could proceed in accordance with each landowners' planning and capabilities.		<u>Alternative IIIa - No Grazing</u> No significant impacts.	fences, reservoirs, access, etc., would be required to alleviate trespass and improve the manageability of these parcels.	

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Chapter 1

Introduction

Chapter 1

INTRODUCTION

LOCATION OF THE STUDY AREA

The Alturas Planning Area is located in northeastern California, in Lassen and Modoc Counties. The planning area consists of approximately 407,306 acres of public lands high in recreation use (primarily hunting, fishing, and camping) and low in permanent population. BLM lands within the Area contain about 5,000 acres of commercial forest land and 250,000 acres of juniper-type woodlands, but the foremost commercial use of BLM lands is livestock grazing. The Modoc National Forest is adjacent to the Alturas Planning Area (see MAPS 1-1 and 1-2).

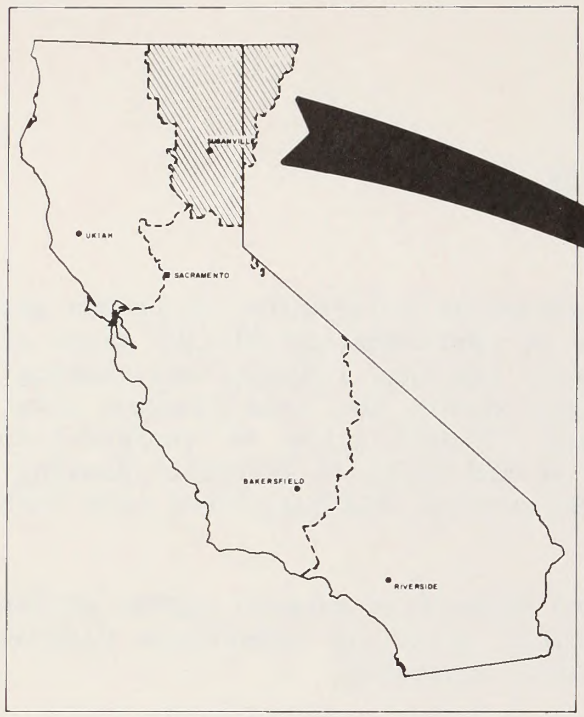
The BLM manages 407,306 acres of surface and subsurface mineral rights within the Planning Area. BLM also manages 116,050 acres of subsurface mineral rights where surface acreage is held in private ownership.

PURPOSE OF AND NEED FOR ACTION

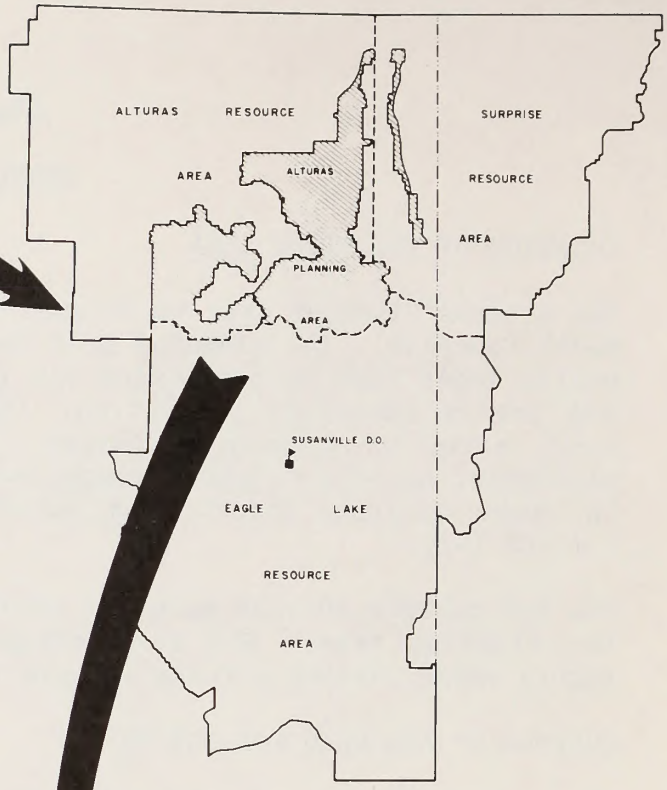
The purpose of the Proposed Plan in this final environmental impact statement (FEIS) is to identify what the BLM believes to be the best management approach for resolving identified resource management concerns and public issues for the next 10 years. These concerns and issues determined the need for planning by pointing out management opportunities or problems associated with current management. The issues and goals to address the issues are presented on page 1-5 of this FEIS.

The plan proposes land use allocations, broad production goals, and restrictions on some resource programs to protect important resource values. In most cases, it does not describe or analyze all the specific actions that would be taken to implement the proposals. Some specific actions will be described and analyzed in site-specific activity plans following approval of the Preferred Alternative.

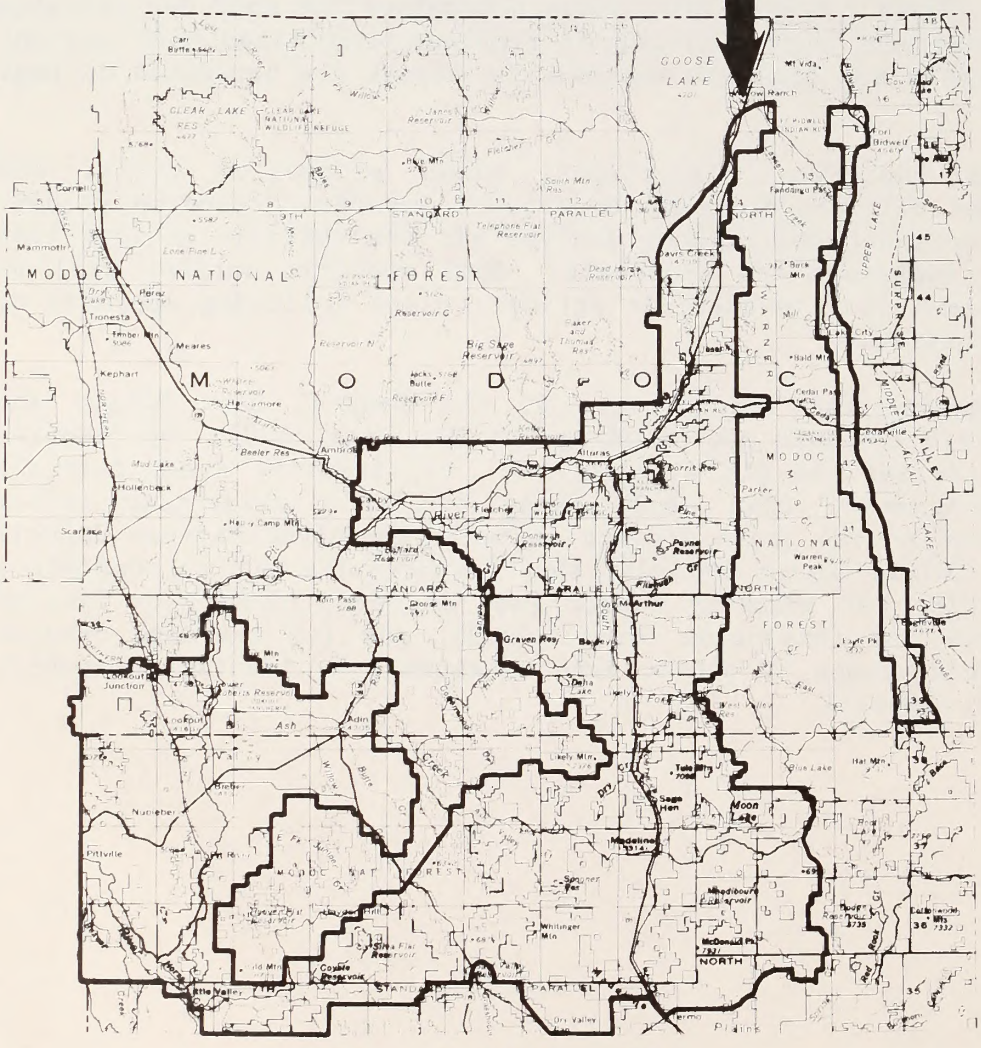
In addition to meeting the requirements in the Federal Land Policy and Management Act of 1976 for land use planning (43 CFR, Part 1600), the resource management plan satisfies the BLM's policy to: (1) identify lands suitable for wilderness designation (the study phase of BLM's wilderness review process); (2) respond to the court mandate (Natural Resources Defense Council et al. versus Watt (Civil Action 1983-75) that requires the BLM to complete a livestock grazing EIS; (3) identify public land as open, closed, or limited for off-road vehicle use (Executive Order 11989); and (4) increase overall efficiency and effectiveness of public land management by identifying public lands for potential disposal.



CALIFORNIA



SUSANVILLE DISTRICT

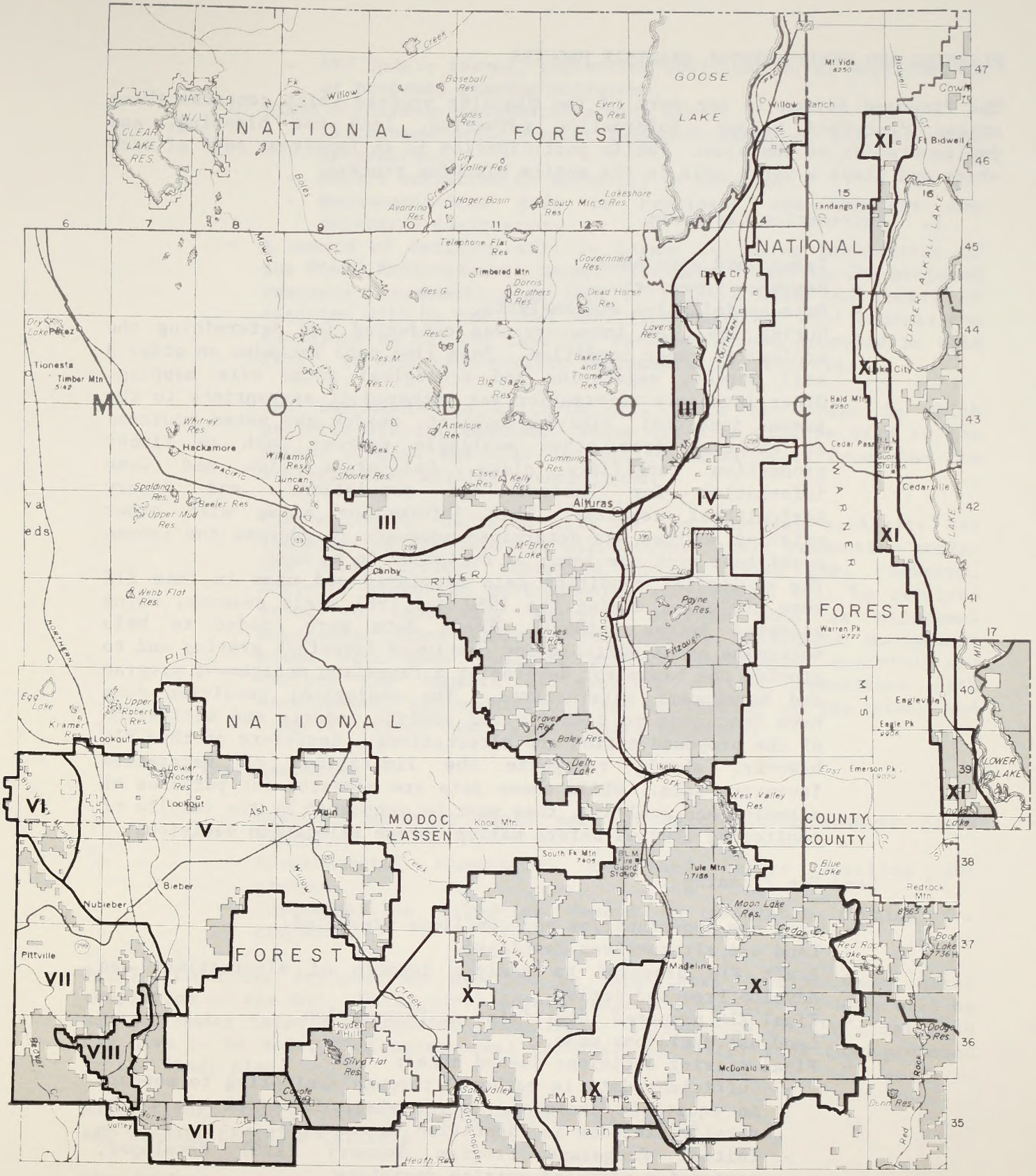


ALTURAS PLANNING AREA

Map 1-1

ALTURAS PLANNING AREA

GENERAL LOCATION



Legend

—— **Management Area Boundary**

ALTURAS PLANNING AREA

Map 1-2

PLANNING AND ENVIRONMENTAL ANALYSIS PROCESS

The Proposed Action is one part of the planning process which contains three stages described below: information gathering, land use planning, and implementation of the plan. Public participation is an important part of each stage and plays a vital role in the entire planning process.

1. Information Gathering

- Issues and data needs.
- Resource inventory.
- Data assimilation and analysis.
- During 1981, an inventory was conducted for determining the ecological range condition. Base line data includes an order 3 soil survey, vegetation and ecological range site mapping. Other inventory information was gathered if appropriate to the issues involved: riparian habitat, meadow and water sources, or gathered from other available sources such as timber production capability class, California Fish and Game information for habitat and populations, and County Agricultural reports. This information along with other existing sources was determined adequate to address the issues consistent with the level of decisions to be made.
- The ecological condition data displayed and used in this EIS were collected during the 1980 and 1981 field seasons, using accepted Bureau methods. These data were needed to help determine areas suitable for continued livestock grazing and to provide the basis for developing a rangeland management program and management alternatives. The ecological condition data have been used to identify and analyze impacts and mitigation of the proposed action and alternatives. Reviewers of this EIS however, should recognize the limitations of vegetation inventory data. While these data are adequate for purposes of planning and analysis, they must be supported by the results of monitoring studies before making forage allocation decisions.

2. Land Use Planning

- Land use opportunities and conflicts presented.
- Land use alternatives developed.
- Draft EIS prepared to analyze impacts of alternatives and develop Proposed Action.
- Final EIS prepared identifying preferred plan.
- Land use decisions made.
- Final grazing decisions issued after:
    - Sufficient data is gathered through monitoring to support an equitable decision, except where livestock are to be totally excluded as identified in the plan.
    - Initial Rangeland Program Summary (RPS) developed, containing proposed grazing decisions.
    - Affected operators consulted on proposed grazing decisions.

- RPS Update issued, reflecting modification or verification of proposed grazing decisions.

- Final wilderness designations made after:
  - Wilderness Study Report prepared based on EIS preferred alternative.
  - Report submitted to Secretary of Interior.
  - Recommendations made to President and Congress who determine designation.

- A record of decision will be issued following publication of the Final Environmental Impact Statement (FEIS) on the proposed resource management plan (RMP). Printed with the record of decision will be the final RMP. The final RMP will contain the decisions on all the land use recommendations proposed in this FEIS. It will also contain implementation criteria.

  The implementation criteria will guide the order in which projects are implemented. These criteria will be tied to the budget process and will be applied annually to determine the projects that will be accomplished.

  The record of decision will be the approval authority for implementing the land use allocations, broad production goals, and other actions contained in the final RMP. However, activity plans and environmental assessments will be required prior to conducting specific actions such as allotment management plans (AMPs). For example, allotment management plans will show specific project locations; describe and analyze the impacts of specific actions associated with development, implementation, and monitoring of the plan; and compare project costs with project benefits.

3. Implementation

- Resource activity plans such as Allotment Management Plans (AMPs).
- Environmental Assessments completed before starting any project.
- Implementation schedules depend on available funding for projects.

Final wilderness designations may not be made until several years after completion of the RMP. Until final determinations are made, all WSAs will be managed under interim management guidelines. Adjustments to the final plan may have to be made, if Congressional designations differ from that proposed in the final plan.

MAJOR ISSUES, GOALS, ALTERNATIVE DEVELOPMENT CRITERIA, AND OVERALL DECISION CRITERIA

The following issues, goals, alternative development criteria, and overall decision criteria were developed in the early stages of planning by BLM, the public, and coordination with state and local governments. These elements guided the planning process.

Major Issues and Goals

Recreation/OHV

Issue: What recreation opportunities will be provided?

Goal: Provide a broad spectrum of recreational opportunities.

Cultural Resources

Issue: What direction will be provided for the inventory, management, and interpretation of cultural resources?

Goal: Insure that cultural resources of high scientific, interpretive, or socio-cultural significance are not destroyed by other land uses.

Fish and Wildlife

Issue: Where, what kind, and how much habitat will be provided for fish and wildlife species?

Goal: Provide sufficient habitat for native fish and wildlife species and give emphasis to maintaining or improving certain key habitats.

Wetland Riparian

Issue: What will be the management direction for wetland and riparian habitats?

Goal: Manage wetland and riparian areas to improve or maintain productivity.

Range

Issue: What will be the level of range use and development?

Goal: -Provide a sustained yield of forage to meet demand while maintaining the productivity of the land.

-Increase forage productivity on lands producing below their potential through improved management and cost-efficient development.

Threatened and Endangered Species

Issue: How will habitats be improved for threatened, endangered, and sensitive plant and animal species?

Goal: Provide habitats to maintain and enhance the populations of threatened, endangered, and sensitive species.

Timber

Issue: What amounts, methods, and locations of timber harvest and other silvicultural activities will be practiced?

Goal: Provide a sustained yield of commercial timber to meet demand by enhancing the growth quality and utilization of timber resources.

Fuelwood

Issue: How and where will fuelwood be managed?

Goal: Provide fuelwood to meet user demand.

Soil and Water

Issue: How will watersheds be managed to maintain or enhance water quality, water quantity, and soil productivity?

Goal: -Increase water availability to meet resource needs.
-Maintain/enhance water quality.
-Maintain/enhance soil productivity.

Minerals/Energy

Issue: How will mineral areas be managed?

Goal: Determine mineral occurrences in the resource area and establish guidelines for the management of the locatable, leaseable, and saleable surface and subsurface mineral resources.

Socioeconomics

Issue: How will the effect of management be considered in relation to community stability?

Goal: Maintain or enhance the socioeconomic factors (including employment, quality of life, and payments to counties) influenced by the agencies' activities in the local area.

Lands

Issue: What will be the priorities for adjustments in land ownership to meet public demand and to support resource management goals and administrative needs?

Goal: Establish guidelines for land ownership adjustments to address public needs and to facilitate management efficiency.

Wilderness

Issue: Which Wilderness Study Areas (WSAs) in the Alturas area will be recommended to Congress for wilderness designation?

Goal: Recommend the appropriate Wilderness Study Areas for wilderness designation.

Alternative Development Criteria and Overall Decision Criteria

The Alternatives (Chapter 2) were developed using the following criteria:

Alternative	Formulation Criteria
I	Manage to maximize AUM and timber production (including fuelwood) to meet identified demand under the principles of sustained yield. Manage to allow for full mineral and energy production capabilities. Manage to support the demand for water quantity as long as minimal water quality standards are met. Manage to stimulate or enhance the socio-economic conditions in the area. Manage for minimal protection of archaeological resources and wetland/ riparian habitat. Manage WSAs as nonwilderness.

Alternative	Formulation Criteria
II	Manage to maximize all resource potentials with mitigation for protection of environmental quality such as water quality, archaeological resources, wetland/riparian habitat, partial wilderness, etc.
III	Manage to minimize human intervention by limiting ORV use, restricting grazing and timber production, and restricting transportation and communication site development. Manage to provide maximum protection for archaeological, wetland/riparian, water quality, and visual quality resources. Manage WSAs as all wilderness.
IIIA	Manage to allow no grazing or AUM consumption by livestock.
IV	Continue present management/No Action.

Then, each alternative was evaluated, with particular emphasis on the significant issues involved, according to the degree to which it:

1. Maintains, enhances, or promotes the social well being of the individuals, families, and communities in the area. Helps to preserve those social, economic and environmental elements determined important by residents of the planning area.

2. Provides for land tenure or use actions which will allow for improved federal land management and meet the needs of national, state, and local people.

3. Meets BLM management objectives and policy of maintaining and providing sustained yield of vegetation for consumptive and nonconsumptive uses.

4. Meets user demands for goods and services from public land, within constraints of multiple use management.

5. Is responsive to the resolution of the maximum number of public issues and management concerns.

6. Meets the BLM Wilderness Study Policy, Wilderness Planning Criteria, and Quality Standards for Analysis and Documentation.

7. Is consistent with State and local government plans, including air and water quality, other agency management goals and objectives, existing land use plans, and transportation and fire management.

After evaluating each alternative, the Preferred Alternative was developed consisting of one or a combination of alternatives for each MA. Impacts were then assessed for the Preferred Alternative. This approach encouraged an unbiased analysis of the alternatives and reaped the benefits from analyzing impacts prior to developing the Preferred Alternative.

Chapter 2

Alternatives

Chapter 2

ALTERNATIVES

DEVELOPMENT OF ALTERNATIVES

Alternatives were developed for each management area (MA) based on the issues and goals listed in Chapter 1 and guided by the alternative formulation criteria, public consultation, coordination with other agencies, and evaluation by BLM. Only significant issues are addressed.

Issue objectives within the alternatives vary among each management, however; they all fall within the following framework:

- Alternatives I, II, and III represent a spread from production-oriented to protection-oriented resource management.
- Alternative IIIA is the No Grazing Alternative. For all other resources, Alternative IIIA is the same as Alternative III.
- Alternative IV is the Continue Present Management Alternative.

The issue objectives are described in the following tables by alternative for each management area. Cumulative alternatives and impacts for the Planning Area can be referred to at the beginning of the EIS in Summary Tables S-1, S-2, and S-3.

The resource maps listed on page xxvii (List of Maps) should be used in conjunction with the alternative descriptions. More detailed maps are available for review in the Alturas Resource Area Office.

Table 2-1
Management Area 1
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE	- Authorize use of 7,301 livestock AUMs with additional authorization to use up to 7,506 suspended nonuse AUMs as determined to be available through monitoring of livestock forage. Authorize 55 AUMs in South Field Allotment. (Currently not licensed.) - Existing season of use on all allotments. - Heavy utilization in individual pastures in allotments providing rest. - Moderate utilization in all other allotments. <u>Support Needs</u> - 2,000 acres of experimental burn and seed in North and South Tablelands. - 1 reservoir development. - Revise North Tablelands AMP.	- Authorize use of 7,301 livestock AUMs with additional authorization to use up to 7,506 suspended nonuse AUMs as determined to be available through monitoring of livestock forage and wildlife habitat trend. - Existing season of use. - Heavy utilization in pastures of AMPs allowing rest. - Moderate utilization in all other allotments. <u>Support Needs</u> Same as Alternative 1.	- Authorize livestock use of 5,841 AUMs after allocation of wildlife, watershed, and riparian needs (1,470 AUMs)*. - Existing seasons of use. - Light utilization. - Exclude livestock grazing from entire Fitzhugh Creek corridor. <u>Support Needs</u> - Add Signal Butte to North Tablelands AMP. <u>Alternative IIIa - No Grazing</u> - No livestock grazing.	- Maintain existing cattle use of 7,351 AUMs. - Present season of use. - Continue light to moderate utilization. <u>Support Needs</u> - Revise North Tablelands AMP. - Existing project maintenance. - Conduct experimental burn and seed to treat medusahead on 2,000 acres. - Construct 1 reservoir.
FISH AND WILDLIFE	- Deer/antelope and sage grouse habitat subject to current management.	- Maintain existing improvements and enhance fisheries and riparian habitat on 6.5 miles of Fitzhugh Creek.	- Maintain existing improvements and enhance fisheries and riparian habitat on 6.5 miles of Fitzhugh Creek.	- Maintain 33,040 acres of deer/antelope winter range and 13 sage grouse strutting grounds. No manipulation proposed.

* There is no data available on AUMs needed for wildlife. Calculations assumed a reduction from present utilization levels to a light (40%) utilization level.

Table 2-1 (continued)
Management Area 1
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
FISH AND WILDLIFE (continued)	- Maintain existing improvements and enhance fisheries and riparian habitat on 2.5 miles of Fitzhugh Creek. Support Needs - Complete implementation of Fitzhugh Creek HMP.	- 33,040 acres of deer winter range and antelope winter range subject to current management. - Maintain 13 sage grouse strutting grounds. - Enhance fisheries, watershed, and riparian values. Support Needs - Fence meadows at 8 springs and 3 reservoirs. - Allow no permanent development on sage grouse strutting grounds and impose seasonal restrictions on potentially disturbing activities from February 15 to May 1. - Restrict vegetative treatments on strutting grounds. - Complete implementation of Fitzhugh Creek HMP. - Exclude livestock grazing from Fitzhugh Creek Corridor.	- Enhance deer/antelope winter range. - Protect 13 strutting grounds and enhance nesting opportunities for sage grouse. Support Needs Same as Alternative II, except: - Complete HMP implementation on Fitzhugh Creek and expand exclosure and habitat improvements to include 6.5 miles of stream. - Use prescribed burn 200 acres to improve decadent browse. - Restrict permanent development on strutting grounds and seasonally restrict disturbing activities from February 15 to May 1 around all sage grouse strutting grounds. - Prohibit vegetative treatments which would reduce the sagebrush component on strutting grounds.	- Maintain existing improvements and enhance fisheries and riparian habitat on 2.5 miles of Fitzhugh Creek. Support Needs - Complete implementation of Fitzhugh Creek HMP.

Table 2-1 (continued)
Management Area 1
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
TIMBER	- Continue intensive management on 57 acres of timber base lands. - Reinstate 7 acres of commercial forest land into the timber base in Dervin Field.	- Continue intensive management on 57 acres. - Allow timber harvest in Corbie Allotment (18 acres), maximizing soil protection along Pine Creek.	- Same as Alternative II.	- Continue intensive management on 57 acres of commercial timber base lands. - Maintain withdrawal of 7 acres in Dervin Field Allotment. Support Needs - Precommercial thinning, timber sales, reforestation, prescribed fire.
WATERSHED	- Maintain water quality in Pine Creek and Fitzhugh Creek. - Maintain roadways on Likely Table. Support Needs - Develop Best Management Practices (BMP) for Pine Creek and Fitzhugh Creek. - Require mitigation of timber operations along Pine Creek. - Grade and reroute roadways in deteriorated areas.	- Improve water quality and riparian vegetation along Pine Creek and Fitzhugh Creek. - Maintain roadways on the Likely Table. Support Needs - Develop BMP for Pine Creek, requiring restrictive timber harvest methods, which preclude mitigation. - Adopt existing Fitzhugh Creek HMP as BMP in addition to planting willows and maintaining instream structures along the creek to provide shade cover.	- Enhance and improve water quality along Fitzhugh Creek and Pine Creek. - Maintain roadways on Likely Table. Support Needs Same as Alternative II, except: - Restrict OHV use on Tablelands during wet periods.	- Improve water quality in Fitzhugh Creek. - Minimal maintenance on the Tablelands road network. Support Needs - Develop BMP for Fitzhugh Creek, consistent with the HMP.

Table 2-1 (continued)
Management Area 1
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
WATERSHED (continued)		- Exclude OHVs from Fitzhugh Creek corridor. - Grade and realign lengths of Tableland road network.		
CULTURAL	- Protect only those sites with National Register potential.	- Designate 3 National Register Districts. - Designate 5 National Register Sites. Support Needs - Restrict OHV use to designated routes within National Register Districts and Sites. - Develop a CRMP on Fitzhugh Creek. - Establish buffer zones around National Register Sites and Districts.	- Designate 3 National Register Districts. - Designate 5 National Register Sites. Support Needs - Same As Alternative II.	- Continue protection of cultural values as provided by law.
LANDS	- Improve manageability of small, isolated parcels of public lands. Support Needs - Consider 720 acres of public lands for potential disposal.	- Same as Alternative I.	- Improve manageability of isolated tracts of public lands giving full consideration to natural resource values. Support Needs - Consider 520 acres of public lands for potential disposal.	- Public land disposals considered on a case-by-case basis.

Table 2-1 (continued)
Management Area 2
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE	- Authorize existing use of 4,463 livestock AUMs with additional authorization to use up to 5,113 suspended nonuse AUMs as determined to be available through monitoring of livestock forage. - Allow 60 day extensions in season of use in North Graves and Mackey Allotments. - Allow 30 day extensions in season of use in Ryegrass Swale. - Allow heavy utilization in individual pastures in grazing systems providing rest. - Moderate utilization in all others. Support Needs - Burn and release 4,000 acres. - Burn and seed 2,500 acres. - Construct 7 reservoirs. - Build 2 miles of fence. - Develop 3 new AMPs. - Revise 2 AMPs.	- Authorize existing use of 4,463 livestock AUMs with additional authorization to use up to 5,113 suspended nonuse AUMs as determined to be available through monitoring of livestock forage and wildlife habitat trend. - Allow 30 day extensions in season of use in Ryegrass Allotment. - Allow 60 day extensions in season of use in North Graves and Mackey Allotment. - Heavy utilization in individual pastures within allotments allowing rest. Support Needs - Same as Alternative I.	- Authorize livestock use of 2,990 AUMs after allocation of wildlife, watershed and riparian needs (1,473 AUMs). - Allow moderate utilization in AMPs, light elsewhere. - Existing season of use. Support Needs - Construct 7 reservoirs. - Build 1 mile of fence. - Revise 2 AMPs. - Develop 3 new AMPs. Alternative IIIa - No Grazing - No livestock grazing.	- Maintain existing livestock use of 4,463 AUMs. - Continue present season of use. - Continue moderate utilization. Support Needs - Existing project maintenance. - Burn and release on 4,000 acres. - Build 1 mile of fence. - Burn and seed 1,000 acres. - Construct 2 reservoirs. - Revise 2 AMPs.

Table 2-1 (continued)
Management Area 2
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
FISH AND WILDLIFE	- Antelope summer range and sage grouse strutting grounds subject to current management. - Improve browse on deer winter range. Support Needs - Thin 2,960 acres of junipers.	- Improve browse on deer winter range. - Improve meadow and spring habitats. - Maintain one sage grouse strutting ground. - Antelope summer range subject to current management. Support Needs - Thin 2,960 acres of juniper. - Fence 17 springs and meadows. - Allow no permanent developments on sage grouse strutting ground and improse seasonal restrictions on potentially disturbing activities from February 15 to May 1. - Restrict vegetative treatment on strutting grounds.	- Antelope summer range, subject to current management. - Protect one sage grouse strutting ground and enhance nesting opportunities. - Protect meadows and springs. - Improve browse on deer winter range. Support Needs - Fence meadows at 17 springs and 1 reservoir to exclude livestock. - Thin 2,960 acres of juniper to improve decadent browse. - Prohibit permanent development of one strutting ground and seasonally restrict disturbing activities from February 15 to May 1 within one mile of all sage grouse strutting grounds. - Prohibit vegetative treatments on strutting ground which would reduce the sagebrush component.	- Maintain 37,684 acres of deer winter range, 6,100 acres of antelope kidding grounds, and one sage grouse strutting ground. No manipulation proposed.

Table 2-1 (continued)
Management Area 2
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
FUELWOOD	- Permit the harvest of juniper, mahogany, and commercial species on all public lands.	- Allow fuelwood harvest, except within Wade Williams National Register District and the 10-acre buffer zone of the Eriogonum prociduum population. - Direct cutting to designated areas to improve wildlife forage and browse.	- Allow fuelwood harvest, except within Wade Williams National Register District and 10-acre buffer zone of Eriogonum prociduum. - Direct cutting to designated areas to improve wildlife forage and browse.	- Continue issuance of juniper fuelwood permits upon demand on 20,585 acres.
TIMBER	- Continue intensive management practices on 83 acres.	- Continue intensive management practices on 83 acres.	- Continue intensive management practices on 83 acres.	- Continue plans for 1984 timber sale on 83 acres of commercial timber base land. Support Needs - Timber sales, precommercial thinning, reforestation, prescribed fire.
T & E	- Provide minimum protection of Eriogonum prociduum as required by Bureau policy.	- Provide protection to Eriogonum prociduum. - Restrict OHV use to existing routes. Support Needs - Establish 10-acre buffer zone around T & E populations.	- Restrict OHV use to existing routes. - Provide protection to Eriogonum prociduum. Support Needs - Same as Alternative II.	- Continue protection of Eriogonum prociduum as provided by Bureau policy.

Table 2-1 (continued)
Management Area 2
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
CULTURAL	- Protect only those sites with National Register potential.	- Designate 1 National Register District (Wade Williams Canyon). - Designate 6 National Register Sites. Support Needs - Restrict OHV use around National Register areas. - Establish buffer zones around 6 National Register Sites and 1 National Register District.	- Designate 1 National Register District. - Designate 6 National Register Sites. Support Needs - Establish buffer zones around 1 National Register District and 6 National Register Sites. - Restrict OHV use to designated routes around National Register areas.	- Continue protection of cultural values, as provided by law.
LANDS	- Improve manageability on small isolated tracts of public lands. Support Needs - Consider 360 acres of public lands for potential disposal.	- Improve manageability of small isolated tracts of public lands. Support Needs - Consider 160 acres of public lands for potential disposal.	- Retain public lands in federal ownership.	- Consider disposal of public lands on a case-by-case basis.

Table 2-1 (continued)
Management Area 3
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE	- Authorize 658 livestock AUMs with additional authorization to use up to 289 suspended nonuse AUMs as determined to be available through monitoring of livestock forage. - Allow moderate utilization. - Existing season of use. - Provide portion of forage for 150 wild horses and burros. <u>Support Needs</u> - Thin and seed 150 acres of juniper. - Construct 3 reservoirs. - Develop coordinated AMP for Strip Allotment and adjacent Forest Service allotment.	- Authorize 658 livestock AUMs with additional authorization to use up to 289 suspended nonuse AUMs as determined to be available through monitoring of livestock forage and wildlife habitat trend. - Develop coordinated AMP with Strip Allotment and adjacent Forest Service allotment. - Provide portion of forage for 150 wild horses and burros. - Allow existing season of use. - Allow moderate utilization. <u>Support Needs</u> Same as Alternative 1.	- Authorize livestock use of 693 AUMs after allocation of wildlife, watershed and riparian needs. - Allow light utilization. - Existing season of use. - Provide portion of forage for 150 wild horses and burros. - Develop coordinated AMP on Strip Allotment. <u>Alternative IIIa - No Grazing</u> - No livestock grazing.	- Maintain existing livestock use of 735 AUMs. - Continue present season of use. - Continue allowing light utilization. - Continue providing forage for 150 wild horses and burros. <u>Support Needs</u> - Existing project maintenance.
FISH AND WILDLIFE	- Deer winter range and antelope habitat, subject to current management.	- Protect Noble and Rattlesnake Springs and meadows from livestock trampling. - Improve browse on deer winter range. - Antelope habitat subject to current management.	- Protect spring and meadows at Noble Spring and Rattlesnake Spring from livestock trampling. - Use prescribed burning on 1,960 acres to improve decadent browse. - Antelope habitat subject to current management.	- No special designations or management for riparian habitat, springs, or fisheries habitat (1-3/4 miles of creeks on public lands).

Table 2-1 (continued)
Management Area 3
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
FISH AND WILDLIFE (continued)		Support Needs - Construct juniper barrier around Rattlesnake Spring. - Construct fence around Noble Spring and meadow. - Open up juniper canopy by directing woodcutting in juniper encroachment areas to rejuvenate decadent browse.	- Maintain one sage grouse strutting ground in Caldwell Allotment. Support Needs - Open up juniper canopy by directing woodcutting in juniper encroachment areas to rejuvenate decadent browse. - Allow no permanent development on one sage grouse strutting ground and impose seasonal restrictions on potentially disturbing activities from February 15 to May 1.	- No active management on deer winter range, antelope winter and summer range and kidding grounds (1,750 acres. No manipulation proposed.
TIMBER	- No commercial timber base lands exist following disposal of public lands.	- No commercial timber base lands exist following disposal of public lands.	- Continue intensive timber management.	- Continue intensive forest management on 22 acres of commercial timber base lands. Support Needs - Timber sales, precommercial thinning, reforestation, prescribed fire.
FUELWOOD	- Permit harvest of juniper upon demand.	- Direct cutting to designated areas to improve wildlife forage and browse. - Remainder of area open to juniper harvest upon demand.	- Direct cutting to designated areas to improve wildlife forage and browse. - Remainder of area open to juniper harvest upon demand.	- Permits allowed for juniper upon demand on 6,540 acres, except on scattered parcels within Modoc Recreation Estates.

Table 2-1 (continued)
Management Area 3
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
CULTURAL	- Protect only those sites with National Register potential.	- Protect 3 cultural sites and/or sites of importance to Native Americans by National Register nomination or CRMP development in X-L Allotment. Support Needs - Restrict OHV use around National Register sites.	- Protect 3 cultural sites of importance to Native Americans by nomination to National Register and/or CRMP development in X-L Allotment. Support Needs - Restrict OHV use to designated routes.	- Continue protection of cultural values, as provided by law.
LANDS	- Improve manageability of small isolated tracts of public lands. Support Needs - Consider 3,080 acres of public lands for potential disposal.	- Improve manageability of isolated tracts of public lands. Support Needs - Consider 1,920 acres of public lands for potential disposal.	- Improve manageability of isolated tracts of public lands giving full consideration to natural resource values. Support Needs - Consider 640 acres of public lands for potential disposal.	- Land disposals presently considered on a case-by-case basis.

Table 2-1 (continued)
Management Area 4
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE	- Allocate cattle use up to 769 AUMs by restoring 316 suspended nonuse AUMs only on those allotments having good management potential (Russell Slough, Capik, Crowder, Russell, Thoms Creek, Brown Field, and one pasture of Gardner). - Allow 30 day extensions in Russell Slough and Crowder Allotments. Existing season of use in all other allotments. - Allow heavy utilization in individual pastures in grazing systems providing rest, moderate utilization in all others. Support Needs - Develop 1 AMP. - Revise 1 AMP. - Fence 2.5 miles in Crowder Allotment. - Construct 3 reservoirs. - Develop 1 well.	- Allocate cattle use up to 1,190 AUMs by restoring 316 suspended nonuse AUMs only on those allotments having good management potential (Russell Slough, Capik, Crowder, Russell, Thoms Creek, Brown Field, and one pasture of Gardner). - All else same as Alternative I. Support Needs Same as Alternative I.	- Allocate cattle use up to 690 AUMs for all allotments except Hughes, Porter Reservoir, Roberts Creek, and a portion of Gardner. - Existing season of use. - Light utilization in all allotments. Support Needs Same as Alternative I. Alternative IIIa - No Grazing - No livestock grazing.	- Maintain existing levels of livestock use of 742 AUMs. - Continue light utilization. - Existing season of use. Support Needs - Existing project maintenance. - Drill 1 well. - Revise 1 AMP.

Table 2-1 (continued)
Management Area 4
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
FISH AND WILDLIFE	- Antelope habitat and sage grouse strutting grounds subject to current management. - Improve browse on deer winter range. <u>Support Needs</u> - Thin 1,600 acres of juniper to rejuvenate browse.	- Sage grouse strutting grounds subject to current management. - Improve browse on deer winter range. - Improve meadow, spring and aspen habitats. <u>Support Needs</u> - Fence 13 springs and meadows. - Use thinning or prescribed fire to reduce juniper encroachment in browse and meadow habitats. - Retain public lands in antelope migration corridor. - Provide temporary livestock exclosures in aspens to allow regeneration to get beyond reach of livestock.	- Protect riparian habitat and fisheries on Lassen Creek. - Current management of springs, meadows, sage grouse, antelope, and riparian areas. - Improve browse on deer winter range. - Improve meadow, spring and aspen habitats. <u>Support Needs</u> - Fence 3/8 miles of Lassen Creek to exclude cattle. - Reduce juniper encroachment in meadow and browse areas by thinning or prescribed burning. - Fence meadows at 9 springs. - Provide temporary livestock exclosures in aspens to allow regeneration to get beyond reach of livestock.	- No special designations or management for riparian or fisheries habitat (3/8 miles of Lassen Creek). - No active management on deer winter range, antelope migration corridor and kidding grounds. No manipulation proposed. - Maintain existing levels of spring maintenance.
FUELWOOD	- Permit the harvest of juniper on all public lands, upon demand.	- Direct cutting to designated areas to improve wildlife forage and browse. - Remainder of area open to juniper harvest, upon demand.	- Direct cutting to designated areas to improve wildlife forage and browse. - Remainder of area open to juniper harvest, upon demand.	- Permits allowed for juniper harvest, upon demand on 3,599 acres.

Table 2-1 (continued)
Management Area 4
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
LANDS	- Improve manageability of public lands. Support Needs - Consider 3,680 acres of public lands for potential disposal.	- Improve manageability of small isolated parcels of public land. Support Needs - Consider 1,960 acres of public lands for potential disposal.	- Improve manageability of isolated parcels of public lands giving full consideration to wildlife values. Support Needs - Consider 720 acres of public lands for potential disposal.	- Land disposal considered on a case-by-case basis.

Table 2-1 (continued)
Management Area 5
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE	- Authorize use of 1,507 livestock AUMs with additional authorization to use up to 210 suspended nonuse AUMs as determined to be available through monitoring of livestock forage. - Allow 30 day extension in season of use in Dibble Hill and Chase Valley. - Existing seasons of use in all other allotments. - Season of use in Knudson and Hayes Spring must be same as adjacent Forest Service allotment. - Moderate utilization on all allotments. Support Needs - Spray and release on 1,000 acres in Chase Valley. - Fence 1.5 miles. - Develop 2 reservoirs. - Develop 1 spring. - Develop 1 AMP.	- Authorize use of 1,529 livestock AUMs with additional authorization to use up to 210 suspended nonuse AUMs as determined to be available through monitoring of livestock forage and wildlife habitat trend. - All else same as Alternative I. Support Needs Same as Alternative I.	- Authorize cattle use of 1,231 AUMs after allocation of wildlife, watershed and riparian needs (609 AUMs). - Existing season of use. - Light utilization in all allotments. - Develop 1 AMP. - Construct 2 reservoirs. - Build 1.5 miles of fence. Alternative IIIa- No Grazing - No livestock grazing.	- Maintain existing cattle use of 1,947 AUMs. - Present season of use. - Moderate utilization levels in all allotments. Support Needs - Existing project maintenance.

Table 2-1 (continued)
Management Area 5
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
FISH AND WILDLIFE	- Deer/antelope winter range, antelope kidding grounds, and sage grouse strutting grounds, subject to current management. - No active raptor management.	- Deer/antelope winter range and antelope kidding grounds, subject to current management. - Protect sensitive raptor nest locations (eagles, and Swainson's hawks). - Maintain sage grouse strutting ground at Juniper Creek and Pilot Butte. - Protect and enhance Iverson Bald Eagle roost. Support Needs - Allow no permanent developments on sage grouse strutting grounds and impose seasonal restrictions on potentially disturbing activities from February 15 to May 1. - Develop HMP for Iverson Bald Eagle roost. - Restrict vegetative treatment on strutting grounds. - Post all Swainson's hawk nest trees to prevent harvest for fuelwood.	- Antelope winter range and kidding grounds, subject to current management. - Improve browse in deer winter range. - Protect and enhance Iverson Bald Eagle roost. - Protect 2 strutting grounds and enhance nesting opportunities for sage grouse. - Protect all raptor nest trees from timber or fuelwood cutting. Support Needs - From April 1 to July 15, limit vehicular access within 200 yards of raptor nest sites susceptible to disturbance. - Prohibit permanent development on 2 strutting grounds and seasonally restrict disturbing activities from February 15 to May 1 within 1 mile of all sage grouse strutting grounds. - Develop HMP for Iverson Bald Eagle roost.	- Maintain adequate deer/antelope winter range, antelope kidding grounds, and sage grouse strutting grounds. No manipulation proposed. - Manage to maintain 2,250 acres of antelope kidding grounds in current condition. - No active raptor management.

Table 2-1 (continued)
Management Area 5
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
FISH AND WILDLIFE (continued)			- Use prescribed burning or juniper thinning to improve decadent browse.	
TIMBER	- Present management on 454 acres of commercial base lands.	- Present management on 454 acres of commercial base lands.	- Present management on 454 acres of commercial base lands.	- Continue intensive timber management practices on 488 acres of commercial base lands. Support Needs - Timber sales, precommercial thinning, brush manipulation, reforestation, prescribed fire.
FUELWOOD	- Permit harvest of juniper, mahogany, and oak on all public lands.	- Permit harvest of juniper upon demand. - Allow limited harvest of oak and mahogany in salvage areas following fire, in wood products sale or disposal areas, or where beneficial to wildlife habitats.	- Permit harvest of juniper upon demand. - Allow limited harvest of oak and mahogany in salvage areas following fire, in wood products sale or disposal areas, or where beneficial to wildlife habitats.	- Continue issuance of permits for juniper fuelwood on 3,600 acres, upon demand.
CULTURAL	- Protect only those sites with National Register potential.	- Designate 3 National Register Sites and 1 National Register District. Support Needs - Restrict OHV use around National Register Sites. - Develop a CRMP on Juniper Creek.	- Designate 3 National Register Sites and 1 National Register District. Support Needs - Same as Alternative II.	- Continue protection of cultural values, as provided by law.

Table 2-1 (continued)
Management Area 5
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
CULTURAL (continued)		- Establish buffer zones around National Register Sites and Districts.		
LANDS	- Improve manageability of public lands. Support Needs - Consider disposal of 3,040 acres of public lands.	- Improve manageability of public lands. Support Needs - Consider disposal of 2,560 acres of public lands.	- Improve manageability of public lands giving full consideration to natural resource values. Support Needs - Consider disposal of 1,240 acres of public lands.	- Land disposal considered on a case-by-case basis.

Table 2-1 (continued)
Management Area 6
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE	- Present management.	- Present management.	- Present management. Alt. IIIa - No Grazing - No livestock grazing.	- Maintain existing cattle use of 80 AUMs. - Present season of use - Moderate utilization level. Support Needs - Existing project maintenance.
FISH AND WILDLIFE	- Protect springhead at Bear Spring. Support Needs - Fence Bear Spring and Meadow to exclude livestock.	- Same as Alternative I.	- Same as Alternative I.	- No active management.
TIMBER	- Present management.	- Present management on 1,624 acres.	- Present management on 1,624 acres.	- Intensive timber management on 1,854 acres of commercial timber base lands. Support Needs - Precommercial thinning, timber sales, reforestation, brush manipulation, prescribed fire.

Table 2-1 (continued)
Management Area 6
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
LANDS	- Present management.	- Improve manageability of public lands. - Consider potential disposal of 230 acres of public lands.	- Improve manageability of public lands. - Consider potential disposal of 230 acres of public lands.	- Land disposal considered on a case-by-case basis.

Table 2-1 (continued)
Management Area 7
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE	- Authorize use of 5,356 livestock AUMs with additional authorization to use up to 2,006 suspended nonuse AUMs as determined to be available through monitoring of livestock forage. - Allow extensions in season of use in 7 allotments with proposed AMPs (Dixie Valley, Muck Valley, East Beaver Creek, Plantation, Bald Mountain, W. Beaver Creek, and Thompson). - Heavy utilization on individual pastures within AMPs allowing rest. - Moderate utilization on remaining allotments. Support Needs - Burn and seed 1,940 acres. - Burn and release 2,200 acres. - 500 acres juniper removal. - Construct 8 miles of fence. - Develop 1 spring. - Develop 6 AMPs.	- Authorize use of 5,356 livestock AUMs with additional authorization to use up to 2,006 suspended nonuse AUMs as determined to be available through monitoring of livestock forage and wildlife habitat trend. - All else same as Alternative I. Support Needs Same as Alternative I.	- Authorize cattle use of 4,150 AUMs after allocation of wildlife, watershed, and riparian values (1,084 AUMs). - Existing season of use. - Light utilization. - Develop 6 AMPs. - Construct 4 reservoirs. - Develop 1 spring. - Construct 8 miles of fence. Alternative IIIa - No livestock grazing.	- Maintain existing cattle use of 5,386 AUMs. - Continue light to moderate utilization. - Continue existing season of use. Support Needs - Maintain existing projects.

Table 2-1 (continued)
Management Area 7
Alternatives

Issue	Alternative I Maximize Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
FISH AND WILDLIFE	- Antelope habitat subject to current management. - Deer winter range (Day Bench) managed in accordance with existing HMP.	- Improve riparian condition on Russell Dairy and upper Horse Creeks. - Enhance browse in deer winter range on Day Bench. - Establish and protect deer migration routes on Day Bench. - Antelope habitat subject to current management. Support Needs - Exclude cattle by fencing on total of 3½ miles of upper Horse and Russell Dairy Creeks. - Acquire private parcels as opportunity arises in deer migration corridor on Day Bench. - Implement existing HMP for prescribed burning of approximately 2,600 acres.	- Same as Alternative II.	- Maintain adequate deer winter range habitat on Day Bench. --Prescribed burn on 2,600 acres. --Manage in accordance with HMP. - Manage 2,900 acres of antelope winter range and kidding ground to keep in good condition. - 15 miles of riparian stream habitat (3 streams) have no active plans or designations.
WATERSHED	- No special management.	- Protect 350 acres of riparian meadows and springs in Sheep Valley by excluding livestock with fences.	- Protect 5,440 acres in Sheep Valley by fencing meadows, springs, creeks, and immediate watershed to exclude livestock.*	- Approximately 5,400 acres in Sheep Valley are degrading. Meadows and wetlands are receiving no special management.

* 1,600 acres of Sheep Valley fall within MA 10. The watershed issue for the entire valley is addressed within this MA for simplicity. The issue is later referenced in MA 10 to reflect range management.

Table 2-1 (continued)
Management Area 7
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
WATERSHED (continued)		- Protect an additional 65 acres of riparian values from fuelwood harvest. - Restrict vehicular traffic within the 350 acres. Support Needs - Develop BMP for Sheep Valley Riparian areas.	Support Needs - Restrict OHV use within ACEC. - Designate Sheep Valley as an ACEC. - Develop BMP for Sheep Valley riparian areas.	
TIMBER	- Continue to apply intensive timber management to 1,075 acres of timber base lands on sustained yield basis.	- Existing intensive management.	- Existing intensive management.	- Continue intensive timber management on 1,075 acres of commercial timber base lands. Support Needs - Precommercial thinning, timber sales, reforestation, prescribed fire.
FUELWOOD	- Permit harvest of oak, juniper, and mahogany upon demand.	- Permit harvest of juniper except in Sheep Valley (350 acres) and Beaver Creek National Register District (2,400 acres). - Allow limited harvest of oak and mahogany in salvage areas following fire, in wood products sale or disposal areas or where beneficial to wildlife habitats.	- Permit harvest of juniper except in Sheep Valley ACEC (5,440 acres) and Beaver Creek National Register District (2,400 acres). - Allow limited harvest of oak and mahogany in salvage areas following fire, in wood products sale or disposal areas or where beneficial to wildlife habitats.	- Permits for juniper fuelwood issued upon demand on 21,700 acres.

Table 2-1 (continued)
Management Area 7
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
MINERALS	- Allow full use of existing cinder pits, and any new sources that are identified. - Allow flat rock sales within Beaver Creek Rim and Dixie Valley areas.	- Allow full use of existing cinders pits. Establishment of new pits considered on a case-by-case basis. - Flat rock sales prohibited in National Register Districts (2,400 acres in Beaver Creek).	- Exclude flat rock sales, continue cinder usage from existing pits.	- Continue material sales for cinders from Babcock, Round Barn, and Day Pits. - Continue material sales for decorative flat rock on Beaver Creek Rim.
CULTURAL	- Protect sites with National Register potential.	- Designate 3 National Register Districts and 5 National Register Sites. Support Needs - Fence 4 cultural sites in upper Horse Creek to exclude cattle. - OHV limited to existing roads and trails in designated Districts and National Register Sites. - Develop 1 CRMP for W. Beaver Creek. - Establish a 2,400 acre buffer zone around W. Beaver Creek National Register District.	- Designate 3 National Register Districts and 5 National Register Sites. Support Needs - Same as Alternative II, except acquire private land within W. Beaver Creek Allotment, to improve manageability of cultural site. - Limit OHV use to existing roads and trails in National Register Districts and National Register Sites.	- No formal protection of known sites.
LANDS	- Continue present management.	- Improve manageability of public lands. Support Needs - Consider 80 acres suitable for potential disposal.	- Same as Alternative II.	- Continue disposal of public lands on a case-by-case basis.

Table 2-1 (continued)
Management Area 8
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE	- Authorize use of 310 livestock AUMs with additional authorization to use up to 41 suspended nonuse AUMs as determined to be available through monitoring of livestock forage. - Authorize Round Barn Allotment (25 AUMs). - Allow 30 day extension in season of use in allotments with AMPs. - Present seasons of use on all other allotments. - Heavy utilization in individual pastures wtihin AMPs allowing rest. - Moderate utilization in all other allotments. Support Needs - Construct 3 reservoirs. - Develop 1 AMP (in conjunction with Bald Mountain in MA 7).	- Authorize use of 310 livestock AUMs with additional authorization to use up to 41 suspended nonuse AUMs as determined to be available through monitoring of livestock forage and wildlife habitat trends. - All else the same as Alternative I. Support Needs Same as Alternative I.	- Same as present management except: --Develop 1 AMP (River Pasture in conjunction with Bald Mt. in MA 7). --Construct 3 reservoirs. --Develop 1 spring. Alt. IIIa - No Grazing - No livestock grazing.	- Maintain existing livestock use of 285 AUMs. - Existing season of use. - Continue light to moderate utilization on all allotments. Support Needs - Existing project maintenance.

* Muck Valley, Thompson, and East Beaver Creek Allotments all lie partially within MA 8, but mostly within MA 7. Production figures for these allotments are discussed in MA 7.

Table 2-1 (continued)
Management Area 8
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
FISH AND WILDLIFE	- Protect lower Pit River Canyon riparian habitat. - No active raptor management. - Antelope habitat subject to current management. <u>Support Needs</u> - Construct drift fence to exclude cattle from lower Pit River Canyon.	- Protect lower Pit River Canyon riparian habitat. - Improve meadow habitat at Mud Spring. - Antelope habitat will be subject to current management. - Protect all eagle, falcon, and Swainson hawk nest locations. <u>Support Needs</u> - Post all eagle and Swainson's hawk nest trees to prevent their harvest for fuelwood. - Construct drift fence to exclude cattle from lower Pit River Canyon. - Construct fence to exclude cattle from meadow at Mud Spring.	- Protect lower Pit River Canyon riparian habitat. - Protect all raptor nest trees from fuelwood harvest. - Enhance nesting opportunities for eagles, prairie falcons, and Swainson's hawks. - Antelope habitat will be subject to current management. <u>Support Needs</u> - Construct drift fence to exclude cattle from lower Pit River Canyon. - Post all raptor nest trees to prevent harvest for fuelwood. - Limit vehicular access within 200 yards of eagle, prairie falcon, and Swainson's hawk nest sites from April 1 to July 15.	- No special designations or management for riparian or fisheries habitat (15 miles of stream). - No active raptor management. - Deer winter range, antelope summer range and kidding grounds will remain in adequate condition. No manipulation proposed.
WILDERNESS	- Recommend #CA-020-103 Pit River Canyon WSA (11,575 acres) as nonsuitable for wilderness.	- Recommend 6,640 acres for partial wilderness designation as indicated on map (Pit River Canyon).	- Recommend entire WSA, 11,575 acres, as suitable for wilderness designation.	

Table 2-1 (continued)
Management Area 8
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
WILDERNESS (continued)		- Acquire 740 acres of private land to enhance wilderness manageability.	- Acquire 1,300 acres of private land to enhance wilderness manageability.	- No wilderness designation. All uses allowed at levels present at time of WSA designation and new uses allowed that will not degrade wilderness values until Congress decides wilderness status.
FUELWOOD	- Permit harvest of juniper and oak fuelwood upon demand.	- Permit harvest of juniper fuelwood except within proposed wilderness area. - Allow limited harvest of oak and mahogany in salvage areas following fire, in wood products sale or disposal areas, or where beneficial to wildlife habitats.	- No fuelwood harvest allowed.	- Continue issuance of juniper fuelwood permits upon demand on 4,700 acres.
RECREATION	- All lands open to OHV use.	- Restrict OHV use to designated roads and trails. - Prohibit OHV use within the wilderness area.	- Manage for primitive recreation, prohibit all OHV travel within WSA.	- No use restriction.
CULTURAL	- Protect only those sites with National Register potential.	- Same as Alternative I.	- Protect all cultural sites by nomination to National Register, special designation, or CRMP.	- No formal protection of known sites (inventory continues).

Table 2-1 (continued)
Management Area 9
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE	- Authorize use of 160 livestock AUMs in lower Highway Allotment. - Allow flexibility in season of use of up to 30 days. - Allow moderate utilization levels. - Discontinue licensing of N. Termo, Lane, and the northeast portion of Fillman-Diablo Allotments due to land exchange.	- Same as Alternative 1.	- Same as Alternative I, except: --Allow existing season of use. --Allow light utilization levels. Alt. IIIa - No Grazing - No livestock grazing.	- Same as Alternative I, except: --Allow present season of use. Support Needs - Existing project maintenance.
FISH AND WILDLIFE	- Present management.	- Present management.	- Present management.	- 8,400 acres of antelope summer range and kidding grounds (1,080 acres) under no active management.

Table 2-1 (continued)
Management Area 9
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
T & E PLANTS	- Provide minimal protection of Lomatium ravenii as required by Bureau policy.	- Protect population of Lomatium ravenii. Support Needs - Monitor condition of population annually.	- Protect population of Lomatium ravenii. Support Needs - Same as Alternative II.	- Continue protection of T&E plant species as required by Bureau policy.
LANDS	- Improve manageability of public lands. Support Needs - Consider 8,000 acres of public lands for potential disposal (presently being considered for exchange).	- Same as Alternative I.	- Same as Present Management.	- Continue disposal of public lands on a case-by-case basis. - Consider 8,000 acres of public lands for potential disposal (exchange).

Table 2-1 (continued)
Management Area 10
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE	- Authorize use of 27,529 livestock AUMs with additional authorization to use 16,630 suspended nonuse AUMs as determined to be available through monitoring of livestock forage. - Increase season of use up to 30 days in allotments with AMPs and potential AMPs. - Allow heavy utilization on individual pastures within AMPs. - Allow moderate utilization on all other allotments. Support Needs - Burn and release on 42,000 acres. - Develop 1 spring. - Construct 14 reservoirs. - Build 15 miles of fence. - Develop 6 AMPs.	- Authorize use of 27,786 livestock AUMs with additional authorization to use 16,630 suspended nonuse AUMs as determined to be available through monitoring of livestock forage and wildlife habitat trends. - Allow extensions of up to 30 days in season of use in allotments with AMPs or potential AMPs. - Heavy utilization in individual pastures within allotments allowing rest. - Allow moderate utilization in all other allotments. Support Needs Same as Alternative I.	- Authorize livestock use of 18,755 AUMs after allocation of wildlife, watershed, and riparian needs (9,126 AUMs). - Existing season of use. - Light utilization in all allotments. - Develop 6 AMPs. - Construct 14 reservoirs. - Develop 1 spring. - Construct 15 miles of fence. Alt. IIIa - No Grazing - No livestock grazing.	- Maintain existing livestock use of 28,213 AUMs. - Existing season of use. - Moderate utilization on all allotments. Support Needs - Continue implementation of 3 AMPs. - Burn and release on 31,400 acres. - Construct 3 reservoirs. - Develop 1 spring. - Maintain other existing range projects.
FISH AND WILDLIFE	- Deer winter range, sage grouse strutting grounds, and antelope habitats subject to current management.	- Improve browse on deer winter range. - Antelope habitats subject to current management.	- Improve meadow, spring, and riparian habitats. - Improve browse on deer winter range.	- Maintain deer winter range in present declining condition. - Protect 7 known sage grouse strutting grounds.

Table 2-1 (continued)
Management Area 10
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
FISH AND WILDLIFE (continued)	- Improve ecological condition in riparian areas. Support Needs - Incorporate riparian management into grazing systems.	- Improve meadow, spring, and riparian habitats. - Maintain 7 sage grouse strutting grounds. Support Needs - Use prescribed burning and juniper thinning on 4,000 acres to rejuvenate decadent browse. - Fence meadows at 31 springs and 8 reservoirs to exclude livestock. - Restrict vegetative treatments to protect sage grouse strutting grounds. - Fence 3/4 mile of Dry Creek drainage. - Restrict permanent development on strutting grounds and seasonally restrict disturbing activities from February 15 to May 1 around all sage grouse strutting grounds.	- Antelope habitats subject to current management. - Improve recruitment in aspen stands. - Protect 7 Strutting grounds and enhance nesting opportunities for sage grouse. Support Needs - Fence meadows at 31 springs and 8 reservoirs to exclude livestock. - Use prescribed burning on 1,500 acres and juniper thinning on 4,000 acres to rejuvenate decadent browse. - Fence 50 acres of aspen to exclude livestock in Cold Spring and Tule Lake Allotments. - Fence 3/4 mile of Dry Creek drainage. - Restrict permanent development on strutting grounds and seasonally restrict disturbing activities from February 15 to May 1 around all sage grouse strutting grounds.	- Manage 2,500 acres of antelope kidding grounds in present satisfactory condition. - Allow existing mining, geothermal, and oil and gas exploration and development.

Table 2-1 (continued)
Management Area 10
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
MINERALS	- Allow mineral exploration and development in Hayden Hill area.	- Allow mineral exploration and development in Hayden Hill area.	- Allow existing mining, geothermal and oil and gas exploration and development. - No mineral development within Tule Mountain WSA.	- Continue to allow mineral exploration and development on a case-by-case basis.
WILDERNESS	- Recommend #CA-020-211 Tule Mountain WSA (16,950 acres) as nonsuitable for wilderness designation.	- Recommend entire WSA as nonsuitable for wilderness designation.	- Recommend entire Tule Mountain WSA (16,950 acres) as suitable for wilderness designation.	- No wilderness designation. Tule Mountain WSA will continue to have interim management to maintain wilderness values.
TIMBER	- Continue intensive management on 1,282 acres of timber base lands.	- Continue intensive management on 1,282 acres of timber base lands.	- Exclude intensive management practices from Tule Mountain WSA (151 acres). - Continue intensive management on all other timber base lands (1,172 acres).	- Continue intensive timber management on 1,323 commercial timber base lands. Support Needs - Timber sales, reforestation, precommercial thinning, prescribed fire.
FUELWOOD	- Permit harvest of juniper, mahogany, and commercial species on all public lands.	- Permit harvest of juniper except from fenced T&E plant populations in N. Ash Valley Allotment; direct cutting to open up juniper canopy to improve browse. - Allow limited harvest of oak and mahogany in salvage areas following fire, in wood products sale or disposal areas, or where beneficial to wildlife habitats.	- Permit the harvest of juniper except from fenced T&E plant populations in N. Ash Valley Allotment and Tule Mountain WSA. - Allow limited harvest of oak and mahogany in salvage areas following fire, in wood products sale or disposal areas, or where beneficial to wildlife habitats.	- Permits issued throughout area with demand directed toward 64,319 acres.

Table 2-1 (continued)
Management Area 10
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
CULTURAL	- Protect only those sites with National Register potential.	- Recommend 3 sites for National Register designation. Support Needs - Restrict OHV use to designated routes around the sites. - Establish buffer zones around National Register Sites.	- Recommend 3 sites for National Register designation. Support Needs - Same as Alternative II.	- Continue protection of cultural values as provided by law.
T & E PLANTS	- Provide minimal protection of sensitive plant species as required by Bureau policy.	- Protect and enhance sensitive plant populations in N. Ash Valley. Support Needs - Designate sensitive plant populations as a Research Natural Area. - Develop an HMP for the Research Natural Area. - Restrict OHV use to designated routes. - Recommend acquisition of private lands south of Ash Valley Road.	- Protect and enhance sensitive plant populations in N. Ash Valley. Support Needs - Same as Alternative II.	- Continue protection of cultural values as provided by law. - Continue protection of T&E plant species as provided by Bureau policy.

Table 2-1 (continued)
Management Area 10
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
LANDS	- Improve manageability of isolated uneconomical tracts of public lands. Support Needs - Consider 5,560 acres of public lands for potential disposal.	- Improve manageability of isolated uneconomical tracts of public lands. Support Needs - Consider 4,920 acres of public land for potential disposal.	- Improve manageability of isolated uneconomical tracts of public lands considering wildlife values. Support Needs - Consider 2,760 acres of public lands for potential disposal.	- Continue land disposal on a case-by-case basis.

Table 2-1 (continued)
Management Area 11
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE	- Maintain existing cattle use of 421 AUMs. - Livestock operators to have lead in determining grazing management. Support Needs - Develop 1 AMPs (Upper Lake).	- Authorize 168 cattle AUMs. - Livestock operators to have lead in determining grazing management.	- Maintain existing cattle use of 421 AUMs. Alt. IIIa - No Grazing - No livestock grazing.	- Maintain existing cattle use up to 421 AUMs. - Allow present seasons of use.
TIMBER	- Continue intensive management on 222 acres of base lands on a sustained yield basis.	- Continue intensive management practices on 222 acres of base lands. - Restrict surface disturbance within Fandango National Register District.	- Continue intensive management practices on 222 acres of base lands. - Restrict surface disturbance within Fandango National Register District.	- Continue intensive management practices on 222 acres of commercial timber base lands. Support Needs - Precommercial thinning, timber sales, reforestation, prescribed fire.
CULTURAL	- Protect only those sites with National Register potential.	- Designate 1 National Register District located within Fandango and Upper Lake Allotments. Support Needs - Establish a buffer zone around the National Register Site.	- Designate 1 National Register District located within Fandango and Upper Lake Allotments. Support Needs - Same as Alternative II.	- Protect only those sites with National Register potential.

Table 2-1 (continued)
Management Area 11
Alternatives

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
T & E PLANTS	- Provide minimal protection of T&E plants as required by Bureau policy.	- Protect and enhance T&E plant populations. Support Needs - Monitor sensitive plant populations annually.	- Protect and enhance T&E plant populations. Support Needs - Same as Alternative II.	- Continue protection of T&E plant species as required by Bureau policy.
LANDS	- Improve manageability of small isolated tracts of public lands. Support Needs - Consider 960 acres of public lands for potential disposal.	- Improve manageability of public lands along and adjacent to the east slope of the Warner Mountains. Support Needs - Consider 4,720 acres of public lands for potential disposal.	- Consider disposal of public lands on a case-by-case basis commersurate with public demand (120 acres). - Administrative transfers or exchange proposals involving public lands contiguous to the east side of Warner Mountains would be considered on a case-by-case basis.	- Consider disposal of public lands on a case-by-case basis commensurate with public demand.

TABLE 2-2
SUMMARY OF RANGE IMPROVEMENTS[1/]
Alternative 1

	FENCE (Miles)	BURN (Acres)	SPRAY (Acres)	SEED (Acres)	RESERVOIR	SPRING	JUNIPER REM. (Ac.)	WELL
MA 1:								
N. Tablelands		1,000		1,000	1			
S. Tablelands		1,000		1,000				
MA 2:								
Bailey Dorris		1,000		1,000	2			
S. Graves		4,000			1			
Westside					2			
North Graves	1 mile	500		500				
Mackey		500		500	1			
Ryegrass	1 mile	500		500	1			
MA 3:								
Rimrock				150	1		150	
Strip					2			
MA 4:								
Crowder	2.5 miles				3			
Russell Slough								1
MA 5:								
Chase Valley	1.5 miles		1,000		2	1		
MA 7:								
Plantation/East Beaver Creek		1,940		1,940				
W. Beaver Creek					1			
Bald Mountain/River Pasture	4.5 miles	2,200						
Dixie Valley	3.5 miles				2		500	
Muck Valley					1	1		
MA 8:								
Muck Valley					1	1		
River Pasture					2			

TABLE 2-2 (continued)
SUMMARY OF RANGE IMPROVEMENTS[1/]
Alternative 1

	FENCE (Miles)	BURN (Acres)	SPRAY (Acres)	SEED (Acres)	RESERVOIR	SPRING	JUNIPER REM. (Ac.)	WELL
MA 10:								
Said Valley	1 mile	600						
N. Ash Valley	6 miles	5,000			4			
S. Ash Valley	5 miles							
Nelson Corral		8,000				1		
Tule Lake		18,400			2			
Cold Springs		5,000			1			
N. McDonald		5,000			1			
S. McDonald	3 miles				2			
Silva Flat					3			
Mitchell Hill					1			
	29	54,650	1,000	6,590	37	4	650	1

1/ For cost estimates, refer to Appendix A-3.

TABLE 2-2 (continued)
SUMMARY OF RANGE IMPROVEMENTS[1/]
Alternative 2

	FENCE (Miles)	BURN (Acres)	SPRAY (Acres)	SEED (Acres)	RESERVOIR	SPRING	JUNIPER REM. (Ac.)	WELL
MA 1:								
N. Tablelands		1,000		1,000	1			
S. Tablelands		1,000		1,000				
MA 2:								
Bailey Dorris		1,000		1,000	2			
S. Graves		4,000			1			
Westside					2			
North Graves	1 mile	500		500				
Mackey		500		500	1			
Ryegrass	1 mile	500		500	1			
MA 3:								
Rimrock				150	1		150	
Strip					2			
MA 4:								
Crowder	2.5 miles				3			
Russell Slough								1
MA 5:								
Chase Valley	1.5 miles		1,000		2	1		
MA 7:								
Plantation		1,940		1,940				
W. Beaver Creek					1			
Bald Mountain	4.5 miles	2,200						
Dixie Valley	3.5 miles				2		500	
Muck Valley					1	1		
MA 8:								
Muck Valley					1	1		
River Pasture					2			

TABLE 2-2 (continued)
SUMMARY OF RANGE IMPROVEMENTS[1/]
Alternative 2

	FENCE (Miles)	BURN (Acres)	SPRAY (Acres)	SEED (Acres)	RESERVOIR	SPRING	JUNIPER REM. (Ac.)	WELL
MA 10:								
Said Valley	1 mile	600						
N. Ash Valley	6 miles	5,000			4			
S. Ash Valley	5 miles							
Nelson Corral		8,000				1		
Tule Lake		18,400			2			
Cold Springs		5,000			1			
N. McDonald		5,000			1			
S. McDonald	3 miles				2			
Silva Flat					3			
Mitchell Hill					1			
	29	54,650	1,000	6,590	37	4	650	1

1/ For cost estimates, refer to Appendix A-3.

TABLE 2-2 (continued)
SUMMARY OF RANGE IMPROVEMENTS[1/]
Alternative 3

	FENCE (Miles)	BURN (Acres)	SPRAY (Acres)	SEED (Acres)	RESERVOIR	SPRING	JUNIPER REM. (Ac.)	WELL
MA 1:								
N. Tablelands					1			
MA 2:								
Bailey Dorris					2			
S. Graves					1			
Westside					2			
Mackey					1			
Ryegrass					1			
MA 4:								
Crowder	2.5 miles				3			
Russell Slough								1
MA 5:								
Chase Valley	1.5 miles				2	1		
MA 7:								
W. Beaver Creek					1			
Bald Mountain	4.5 miles							
Dixie Valley	3.5 miles				2			
Muck Valley					1	1		
MA 8:								
Muck Valley					1			
River Pature					2			
MA 10:								
Said Valley	1.0 miles							
N. Ash Valley	6.0 miles				4			
S. Ash Valley	5.0 miles							
Nelson Corral						1		
Tule Lake					2			

TABLE 2-2 (continued)
SUMMARY OF RANGE IMPROVEMENTS[1/]
Alternative 3

	FENCE (Miles)	BURN (Acres)	SPRAY (Acres)	SEED (Acres)	RESERVOIR	SPRING	JUNIPER REM. (Ac.)	WELL
MA 10 (continued):								
Cold Springs					1			
N. McDonald					1			
S. McDonald	3.0 miles				2			
Silva Flat					3			
Mitchell Hill					1			
	2.5				10			1

1/ For cost estimates, refer to Appendix A-3.

TABLE 2-2 (continued)
SUMMARY OF RANGE IMPROVEMENTS[1/]
Alternative 4

	FENCE (Miles)	BURN (Acres)	SPRAY (Acres)	SEED (Acres)	RESERVOIR	SPRING	JUNIPER REM. (Ac.)	WELL
MA 1:								
N. Tablelands		1,000		1,000	1			
S. Tablelands		1,000		1,000				
MA 2:								
S. Graves		',000			1			
N. Graves	1 mile	500		500				
Mackey		500		500	1			
MA 4:								
Russell Slough								1
MA 10:								
Nelson Corral		8,000				1		
Tule Lake		18,400			2			
Cold Springs		5,000			1			
	1	38,400		3,000	6	1		1

1/ For cost estimates, refer to Appendix A-3.

PREFERRED ALTERNATIVE AND RATIONALE

The Preferred Alternative was selected based on the issues raised throughout the planning process, public input, a set of decision criteria, and the environmental analysis developed on the previously-formulated alternatives.

The following discussion explains the Preferred Alternative and the general rationale for selecting this alternative for the Alturas Planning Area.

Preferred Alternative

The Balanced Alternative has been chosen as the Preferred Alternative with the following exceptions:

- MA 6 would be managed according to Alternative I with the objective of specifically maximizing timber production.

- MA 10 incorporates a portion of Alternative III to protect aspen stands, which would include fencing of 50 acres of aspens from livestock grazing in the Cold Spring and Tule Lake Allotments.

- MA 11 would be managed under Alternative III to retain public lands adjacent to the Modoc National Forest in federal ownership. Administrative transfers or exchange proposals involving these parcels would be considered on a case-by-case basis. Potential disposal of 120 acres of isolated 40-acre parcels not contiguous to the forest would be considered on a case-by-case basis.

  This decision reflects public comment received from the Susanville District Advisory Council, Modoc County Supervisors, Sierra Club, and several groups, agencies and individuals expressing their concern for the area.

The Preferred Alternative has also deleted 4,760 acres of public lands previously identified for land disposal. The parcels contain such values as critical deer winter range, antelope migration corridors, antelope kidding grounds, sage grouse strutting grounds, mining claims, etc. These values have been emphasized by interested parties and through further analysis as part of the EIS process. See Appendix C for a list of these parcels in addition to justification for retaining the parcels in federal ownership.

Rationale

Goals were developed for each issue identified early in the planning process. Because of the interrelationship between issues, it was not always possible to meet the stated goal for each issue. Because we recognized this at the outset of the planning process, Decision Criteria were developed to assist in selecting the best management alternative.

Selection of the Preferred Alternative was based on the following criteria to the degree to which it:

1. Utilizes the Decision Criteria to meet the overall objectives of the issues.

2. Allows wilderness for those areas that best meet the wilderness criteria.

3. Allows an optimum level of production while providing protection through management for fragile resources.

4. Authorizes livestock grazing of public rangelands under the principles of multiple use and sustained yield by improvement of the rangeland resources and by making and implementing equitable and supportable decisions through inventories and monitoring.

5. Excludes only 6,640 acres of public lands within Pit River Canyon from entry under the 1872 Mining Law. Additionally, all leaseable and saleable mineral commodities such as oil, gas, geothermal and other materials are precluded from entry.

   Allows 98 percent of the Planning Area to remain open to mineral entry or lease application.

Wilderness Management Rationale

The Preferred Alternative recommends approximately 6,640 acres as suitable for wilderness designation. The following rationale were used to make this determination:

Pit River Canyon

Of the 11,575 acres in the WSA, 6,640 acres would be recommended as suitable. This acreage includes approximately 1,860 acres within the canyon rims of Horse Creek and Pit River and approximately 4,780 acres of upland areas outside the canyons. The recommended area contains numerous special features which enhance the wilderness values such as high density raptor nesting habitat, high archaeological values, unusual scenic quality, and diverse fisheries. The area would add to the diversity in the National Wilderness Preservation System as currently there is no designated wilderness in this landform/ecotype as defined by Bailey and Kuchler.

There are no known mineral sources or potential for minerals development within the area or any other resource uses which would be foregone by wilderness designation. Some conflicts with management for livestock grazing and adjacent private development have been identified within the 11,575 acre WSA.

Approximately 4,935 acres within the WSA would be recommended as nonsuitable for designation. One and three-fourths miles along the far downstream end of the WSA and along Pit River would be deleted due to an unmanageable boundary configuration and lack of solitude. Private lands and Little Valley Road constrict the WSA into a narrow projection generally unmanageable for wilderness characteristics. The annual grass flat and scattered juniper adjacent to Little Valley Road in this area do not provide adequate screening to lend a feeling of solitude.

In the north central portion of the WSA, vehicle routes, stockwater developments, an old cabin, corrals, and fences impair naturalness and are visible from north and west slopes in this area. Additionally, agricultural developments in Muck Valley are readily apparent from these portions of the WSA. The wilderness boundary would follow a watershed division and other topographic features to exclude these impacted areas and provide emphasis for continued range management and development in accessible portions of the Muck Valley Allotment.

The far upstream end of the WSA consists of two linear projections approximately one and one-half miles long on either side of the canyon. The canyon itself is private land. These projections are from less than one-eighth mile to one-half mile in width. This configuration of narrow projections does not provide opportunities for either primitive and unconfined recreation or solitude from adjacent agricultural activities in Muck Valley. Generally, the parcels are unmanageable for wilderness characteristics.

An area east of Horse Creek and north of Little Valley would be deleted due to lack of naturalness and solitude and an unmanageable configuration of land ownership. Numerous vehicle ways and four stockwater developments impair naturalness. Solitude and naturalness would be further impacted by existing and potential development on adjacent private lands in Clark Valley immediately east of the WSA. Private lands near Little Valley intersect Horse Creek Canyon in two locations. Manageability for wilderness characteristics in this area would be significantly impaired.

Tule Mountain

The entire WSA would be recommended as nonsuitable. Lack of overall naturalness, the cumulative effect of present and past nonconforming uses, and effects of potential wilderness designation on continued management for range and wildlife were all factors in the nonsuitable recommendation. In addition to the two roads which penetrate into the center of the WSA, there are 24 stockwater developments and approximately 20 miles of ways within the WSA boundaries. These were considered a significant impairment to the naturalness of the WSA and were the major consideration in choosing the Preferred Alternative.

Livestock management is dependent upon the many stockwater developments. Maintenance of these developments could be allowed within a wilderness area; however, maintenance in this WSA would continue to impair naturalness. Grazing management would be in conflict with wilderness management. The WSA contains commercial forest land, oil and gas lease acreage, and potential for range-type conversion projects would be foregone by wilderness designation. Additionally, the area does not have any special features or identifiable multiple resource benefits which would be enhanced through designation.

South Warner Contiguous

Nine scattered parcels totaling 4,000 acres contiguous to existing U.S. Forest Service South Warner Wilderness were dropped from WSA status and further planning as potential wilderness areas under Section 603 of the Federal Land Policy and Management Act by Secretarial action which deleted all WSA's of less than 5,000 acres. This action was published in the Federal Register on Thursday, December 30, 1982 as an Amendment of Wilderness Inventory Decisions.

Further consideration was given to this area under Section 202 of the same act which provides a vehicle for wilderness designation through the land use planning system. Through this process and through coordination with the Modoc National Forest, a nonsuitable recommendation would be proposed. A parcel by parcel analysis revealed that a utility line runs across two of the parcels and vehicle routes occur on four. Access to a U.S. Forest Service campground splits one parcel with a non-wilderness corridor. The configuration of several of the parcels, bordered on two or three sides by private lands, would not improve manageability of the existing wilderness nor provide any additional features. Solitude is not readily available due to existing adjacent private land development and a county highway.

SUPPLEMENTAL PROGRAM INFORMATION AND GUIDANCE

Specific directives or guidance that pertain to the Alturas Planning Area are summarized in the Alturas Analysis of the Management Situation (U.S. Department of the Interior, 1982). Following are general policy statements that apply for all alternatives:

1. Lands will be acquired or exchanged in accordance with FLPMA and other applicable Federal laws and regulations, to assure more efficient management of the public lands and to reduce conflicts with other public and private landowners to provide more consistency and logic in land use patterns within the Alturas Planning Area. Public lands identified in the future for possible sale or exchange will be evaluated on a case-by-case basis. If they meet specific sale or exchange regulation requirements, they may be determined suitable for sale or exchange.

2. The public lands identified for potential disposal within the alternatives are those that have been screened and should be considered for disposal for greater management efficiency. All public lands within the Planning Area can be disposed of if they meet the disposal criteria of FLPMA, Federal laws and regulations, and would not jeopardize the management objectives (i.e., disposal would have to be in conformance with the management objectives of the plan). Disposal proposals not in conformance would be subject to the amendment process.

3. Agricultural lands that are suitable for disposal would be sold under the public sale authority of Section 203 of the Federal Land Policy and Management Act as consistent with he objectives of this Plan.

4. Rights-of-way, 302 leases, easements, and permits and R&PP applications will be processed in accordance with FLPMA and other applicable Federal laws and regulations to provide public and community services.

5. Use of existing utility corridors will be considered prior to granting rights-of-way (existing corridors are defined as 69 KV lines or larger).

6. The Resource Management Plan replaces and updates the classification of multiple use (C&MU) withdrawal covering public lands within Modoc County. A full range of land uses will be considered/evaluated on a case-by-case basis predicated upon the principles of this multiple-use plan.

7. Public lands currently identified for potential disposal within the alternatives would, during the interim, be managed under existing Bureau policies in their present state.

8. All oil, gas and geothermal leasing, exploration and production will be allowed providing it is in conformance with the specific decisions of this plan and is environmentally acceptable as determined on a case-by-case basis.

   BLM administration of mining claims is covered under the 43 CFR 3809, Surface Management of Public Lands under U.S. Mining Laws. Prospectors can claim and develop locatable minerals on areas open to mineral location. BLM approval would not be needed if proposed operations would disturb 5 acres or less per year, but notification would be required. Operators proposing to disturb more than 5 acres per year would be required to submit a plan of operation, and BLM would then prepare an environmental analysis on the proposed action.

   CFR Parts 3100 and 3200 govern oil, gas and geothermal leasing. Site specific stipulations would be included in any oil and gas or geothermal environmental assessment prior to the issuance of any lease. Upon receival of a plan of development, site specific surveys would be completed to eliminate or mitigate any adverse impacts.

9. Off-highway vehicle use areas on public lands would be assumed as "open" within this planning effort unless designated as "restricted or closed" within each alternative and issue.

10. The collection of inventory data in 1981 plus the existing data on ten AMPs has not provided sufficient information to support adjustments in grazing use. Monitoring of range trend, utilization of forage and browse, actual use information, climate, and wildlife habitat and trend information will be used along with the existing data to support any changes to the present grazing authorizations. As a result, no grazing use allocations would be made in this Plan, except in those areas closed to all livestock grazing as identified in the alternatives.

11. To assess different livestock use levels as required in the EIS, increased and decreased levels of AUMs have been described. Alternatives I and II address the range in AUMs from the existing level to the maximum level (defined as re-authorization of Suspended Nonuse (SNU) preference AUMs, in addition to estimated allotment potential where SNU is not applicable).

    Through monitoring, an intermediate level of AUMs will eventually be allocated, and the authorization of additional AUMs in any alternative is subject to existing laws and regulations. 43 CFR 4110.3-1 states that "Additional forage may be allocated to qualified applicants for livestock grazing use consistent with multiple use management objectives."

    In order to assess the impacts of reduced livestock grazing use, the numbers in Alternative III were calculated assuming a reduction from present utilization levels where known, and "moderate" utilization levels where unknown, to a light (40 percent) utilization level. This is a level of forage consumption assumed to be able to ensure that all resource protection needs are met.

Standard Operating Procedures

1. Land treatment areas and seedings will be rested until seedlings are sufficiently established to resist pull-up from grazing.

2. Construction of fences in wildlife use areas will meet BLM specifications to permit the movement of identified wildlife.

3. Livestock watering developments will be made available and safe for wildlife needs, as identified.

4. All raptor nest trees and necessary habitat will be retained in fuelwood and timber management areas.

5. Fuelwood permits will stipulate:

   a. Use roads only when damage does not occur; prohibit vehicles from meadows, wet dirt roads, or other areas that may be damaged.

   b. During Fire Danger Activity Level 4, chain saw use and off road driving shall be prohibited after 1:00 p.m. When the Fire Danger Activity Level 5 is reached, chain saw use and off road driving shall be prohibited for the entire day. Chain saws used on forest and range lands must be equipped with an approved spark arrester mounted over the exhaust opening.

   c. Cutting of standing oak trees, dead or alive, shall be restricted to designated trees only.

   d. Slash shall be stacked within 50 feet of roads. Slash away from roads shall be cut down and scattered.

6. Special provisions will be added to timber sale and forest development project contracts. These provisions will deal specifically with mitigating environmental impacts that surface during the environmental analysis process. The special provisions will pertain to logging (cutting methods, yarding techniques); construction (requirements for construction or improvement of roads, fences, etc.); environmental protection (eagle and hawk nest protection, revegetation requirements, soil erosion protection measures, etc.); and fire protection (slash disposal requirements, fire equipment requirements, etc.). Provisions contained in the contracts will satisfy mitigation measures as contained in site-specific environmental analyses.

7. Before construction of range developments and vegetation manipulations, cultural resources will be inventoried and evaluated, and attempts to avoid adverse effects will be made. Where this is not possible, consultation will be made with the State Historic Preservation Officer (S.H.P.O.) and the Advisory Council on Historic Preservation to develop acceptable mitigative strategies in accordance with the Programmatic Memorandum of Agreement (dated January 14, 1980) between the Bureau and the Advisory Council. In addition, the views of responsible spokesmen of the local Native American community will be solicited. Conflicts will be resolved in accordance with 36 CFR 800 and in accordance with the Memorandum of Agreement signed by the California Native American Heritage Commission, the California S.H.P.O., and the BLM.

8. All water projects or projects which could influence the beneficial use of water will conform to BLM Best Management Practices Guidelines.

9. Spring sources generally will be fenced to prevent trampling of the immediate area. Livestock and big game water facilities will be provided outside the enclosure where the water source is important to big game distribution in the area or where necessary to maintain adequate livestock distribution within an allotment.

10. All disturbed areas will be reseeded with native and/or introduced species to provide ground cover.

11. New range developments and maintenance of existing developments within Wilderness Study Areas will meet the Bureau's Interim Management Policy.

12. Site specific endangered species inventories will be completed before any project is initiated. Endangered Species Act, Section 7 consultations will be conducted, if deemed necessary.

Livestock Management Program

Selective Management Categories

Included in Table 3-1 is a classification of allotments into selective management categories. This grading system is based upon the concepts that:

- Grazing allotments can be grouped into three resource management categories based on economics, conflicts, potential, forage condition, and management criteria.
- Grazing management intensity can be based on resource management needs.
- The grouping of grazing allotments into categories can establish a priority for the investment of public funds and management efforts.

Selective management directs funds and management to where they will be the most effective. Each allotment was analyzed and classified according to criteria developed during previous land use planning stages.

Additional Allotment Management Plans (AMPs) have been identified by allotment (Alternative 1). Because further consultation with grazers and other interested groups is still needed to achieve useable grazing systems, specific plans have not yet been identified. Projects and plans will be determined following completion of the Final EIS and implemented under the land use plan guidelines.

A description of the three management categories is as follows:

Custodial Category Criteria

- Present range condition is not a factor.
- Allotments have low resource production potential and are producing near their potential.
- Limited resource use conflicts/controversy may exist.

- Opportunities for positive economic return on public investment do not exist or are constrained by technological or economic factors.
- Present management appears satisfactory or is the only logical practice under existing resource conditions.
- Relatively small size.
- Land status variable, but generally contains little public land.

Maintenance Category Criteria

- Present range condition is satisfactory.
- Allotments have moderate or high production potential and are producing near their potential (or trend is moving in that direction).
- No serious resource use conflicts/controversy exist.
- Opportunities may exist for positive economic return from public investments.
- Present management appears satisfactory.
- Land status variable.

Improvement Category Criteria

- Present range condition is unsatisfactory.
- Allotments have moderate to high resource production potential and are producing at low to moderate levels.
- Serious resource use conflicts/controversy exists.
- Opportunities exist for positive economic return from public investments.
- Present management appears unsatisfactory.
- Land status and size is generally well blocked and large.

Additional guidance for placing allotments into M, I and C categories can be found under Appendix A-2.

Priority of Implementation

Adjustments of livestock stocking levels and seasons of use would be completed only after sufficient data is gathered through monitoring.

Prioritization for funding and implementation of AMPs and range developments would be based on the management category for the allotment:

First Priority - Improvement (I) Allotments
Second Priority - Maintenance (M) Allotments
Third Priority - Custodial (C) Allotments

Implementation of the Preferred Alternative would be prioritized as follows:

1. Begin monitoring program to determine any adjustment needs (livestock numbers, seasons of use, vegetative treatments).

2. Develop AMPs and identify vegetation treatments.

Allotment Management Plans (AMPs) are designed to provide management to enhance and improve allotments that have the most potential for improvement or conflict resolution. Some AMPs would include grazing systems which would provide periodic rest from grazing. Site specific factors used in the development of proper AMPs include: precipitation, soil conditions, vegetative composition, permittee involvement, class of livestock, season of use, potential for improvement, land pattern, total size, etc. Because much of this information is unavailable, specific grazing systems would not be determined at this time. These systems will be determined after completion of the FEIS and implemented under the Resource Management Plan.

In developing AMPs, certain undesireable vegetation types may be identified as having potential for significant improvement and increased forage production. In most cases, this involves the removal or reduction of one or more undesireable species (juniper, sagebrush, rabbitbrush, medusahead, cheatgrass) which are inhibiting the growth and expansion of desireable grass species. Several methods to achieve this are:

a. Burn and Seed

In areas where undesireable and/or semi-undesireable species (medusahead, cheatgrass, juniper) have invaded to a point of becoming the dominant species, a burn and seed program is one method of improving livestock forage. Areas requiring this form of treatment are lacking in desireable species abundant enough to reestablish their dominance through natural reseeding. Therefore, a mixture of desirable species must be introduced to replace the undesirable ones. This, followed by adequate rest to insure establishment, should yield positive results.

b. Burn and Release

In sites where brush species have established dominance, but desireable grass species are still abundant, a burn program alone may remedy an unwanted situation. In this case, adequate rest from livestock grazing following the fire would allow sufficient time for the desireable grass species to establish dominance. In either method, burn and seed or burn and release, site specific preparations must be made. In areas where certain grasses or desireable species are exceedingly vulnerable to fire, a spring burn may be necessary to insure a "cool" fire condition. Conversely, in vegetation communities where target species are large overstory types (juniper, big

sage) and the surrounding grass species are relatively fire tolerant, and the objective is to achieve a higher mortality of undesireables, then a fall burn, where the fire would be "hotter", may prove more beneficial.

c. Spray and Release

In cases where loss of fire control would cause irreparable damage, herbicide application by fixed wing aircraft or helicopter offers a viable alternative. In addition to the control factor of spraying, other benefits also exist. While the spray kills or retards the growth of the target species it would not destroy the skeleton, or woody portion of the brush. This skeleton will then act to retain snow and moisture in the winter, thus providing more moisture available for the recovering plants in the spring.

3. Develop water facilities.

Reservoirs and springs are developed to provide water for livestock and wildlife and to improve distribution patterns in an allotment. If livestock do not use a highly productive hillside due to its lack of water, and subsequently over utilize a drainage with a spring then the construction of a reservoir on the hillside would provide more uniform livestock utilization over the whole area.

4. Fences

Fences separate areas where different management schemes can be applied. In many cases, fences are necessary to provide protection for vegetation conversion sites or provide rest to pastures while allowing use in adjacent pastures. Fencing in combination with burning or spraying would be considered during the AMP process.

5. Implement AMPs.

6. Develop vegetation treatments.

To assess impacts of vegetation treatments, Table 2-2 lists present estimation of acreages and treatment methods needed to meet range objectives. During the development of activity plans, methods, costs and acreages are subject to change.

7. Adjust stocking levels and seasons of use in accordance with monitoring results and in consultation with affected users.

Monitoring Program

Range

Monitoring would be conducted at two levels, each to answer a different set of questions. The first level would assure that grazing use is actually following the grazing plan. The second level would determine if the grazing plan is accomplishing the objectives set forth in the plan.

As Allotment Management Plans are developed, a detailed monitoring plan would be made part of each AMP. The monitoring system will be designed and tailored to the allotment.

The information elements of the grazing use monitoring program are outlined below:

1. Monitoring to assure the plan is being followed.

    a. Actual use.
    b. Utilization map.
    c. Permittee/Range Manager inspection tour.

2. Monitoring to meet grazing plan objectives.

    a. Trend Studies

        1) Permanent transects.
        2) Permanent photo stations.
        3) Trend indicator summary.

    b. Special resource studies.

        Examples might be fisheries, archaeological sites, critical habitat, etc.

Fish and Wildlife

Monitor browse species utilizing transects in deer winter range to determine effectiveness of management actions, such as AMPs and vegetative manipulation projects in maintaining browse species.

Monitor response in habitat for targeted species in HMP areas.

Establish trend plots in selected aspen stands in conjunction with five year range monitoring program to establish wildlife habitat objectives to be incorporated into future allotment management plans and establishment of future stocking levels.

Monitor waterfowl production from wetland developments to determine effectiveness of the program.

Determine impacts to selected meadows from livestock grazing through condition and trend studies.

Monitor threatened, endangered or sensitive species populations to ensure viability and determine status of these species.

Wilderness

Collect observations from field personnel visiting wilderness study areas to insure interim management guidelines are met.

Threatened and Endangered Plants

Monitor all threatened and endangered plant locations annual visits to the sites.

Forest Management Program

In 1981, the Bureau prepared a 10-year timber management plan for timber production base lands located in northern and central California. This plan was based on extensive and intensive inventories conducted from 1975 through 1978. The extensive inventory consisted of aerial photo and on-the-ground volume plots. The intensive inventory identified the location, acreage, and condition of timber base lands. Resource conflicts were resolved by reducing the number of acres which would be managed for timber production providing an annual allowable timber cut for the decade (1975-84) within SYU-15. Each of the three districts (Folsom Resource Area, Bakersfield District, Redding Resource Area, Ukiah District, and the entire Susanville District) were allocated portions of the computed allowable timber cut. The Susanville District's allowable cut was determined to be 19.0 million board feet (MMBF) per decade. Based on the acreage percentage (30% of Susanville's timber base lands are covered by the RMP) the projected allowable cut would be 5.70 MMBF per decade.

Five year timber sale and forest development plans are prepared for the Susanville District. Input into the two plans is provided by each Resource Area. Site specific environmental assessments are prepared for each timber sale and forest development project prior to implementation.

Wilderness Management Program

Wilderness Study Process

The Wilderness Act of 1964 provided for the establishment of a National Wilderness Preservation System with areas to be designated from the public lands, national forests, parks, and refuges. FLPMA included the public lands administered by BLM in the wilderness review process. Lands within the scope of this RMP were inventoried and potentially suitable lands were identified as Wilderness Study Areas (WSAs) in the Final Intensive Inventory document dated December, 1979. Through this inventory process and subsequent appeals, two WSAs were identified and carried through the wilderness program:

CA-020-103	Pit River Canyon	11,725 acres
CA-020-211	Tule Mountain	16,950 acres

The wilderness review process has three phases: inventory (completed December, 1979), study (to be completed through this EIS), and report (to be completed by 1983). Inventory includes field investigation, public meetings, workshops, and written comments to identify lands meeting the requirements in Section 2(c) of the Wilderness Act which are carried forward as WSAs. Study includes consideration of all values, resources, and uses to make preliminary determinations of suitable or nonsuitable for wilderness designation by Congress.

Upon completion of the study phase, of which this EIS is a part, the State Director will make a preliminary recommendation and submit it along with a study report to the Secretary of Interior, who will file the Final EIS for wilderness and make a recommendation to the President. The President will make the final recommendation to Congress, which has the authority to designate an area as wilderness. The wilderness recommendations shown in the Preferred Alternative of this document are only the first in a series of recommendations prior to action by Congress.

During the period following identification as a WSA until final designation or nondesignation by Congress, WSAs will be managed as directed by Section 603 of FLPMA: "so as not to impair the suitability of such areas for preservation as wilderness." Mineral and grazing uses will be allowed to continue in the manner and degree in which they were being conducted on the date of approval of FLPMA, even if such use would impair wilderness suitability. The BLM is directed to prevent unnecessary and undue degradation of the lands and their resources and to afford environmental protection. Valid existing rights must be recognized in the management of these areas. Interim Management Policy and Guidelines for Land Under Wilderness Review, dated December 2, 1979, details interim management policy (IMP) for WSAs.

Implications of Wilderness Designation

Areas designated by Congress will be managed in accordance with the provisions of the 1964 Wilderness Act, the specific legislation approving wilderness designation, and the Bureau Wilderness Management Policy of September, 1981, as described in Table 2-3.

Table 2-3

Implications of Wilderness Designation

Minerals Management	Allows mineral entry and development in wilderness areas until midnight, December 31, 1983, or until designation, whichever is later. After that date, only holders of valid existing rights will be allowed to continue operations. All title to reserved land surface is to the United States. Except as expressly provided in the Wilderness Act, no surface use will be allowed unless reasonably required for mining or prospecting.
Access/Developments	Right of access to mining claims, State-owned land, and privately owned lands is preserved, and roads can be maintained. Motorized vehicles and equipment, landing or aircraft, roads, structures, installations, and commercial enterprises are generally prohibited.
Land Exchange	Public land outside designated wilderness can be exchanged for inholdings. However, wilderness designated lands cannot be exchanged; they can be transferred to another Federal agency if they continue to be managed as wilderness.
Grazing	Grazing that existed prior to designation may continue. Certain uses, such as use of motorized vehicles to support grazing, are permissible (House Report 96-617). No new grazing uses are permitted after wilderness designation without Congressional approval. However, allotment management plans may be developed for existing grazing permits.
Wildlife and Vegetation	Exotic species cannot be introduced; native species may be stocked. Most vegetation eradication measures are prohibited unless case-by-case assessment indicates minor impacts on wilderness values.

Wilderness Management Plan	A wilderness management plan will be developed and will specify visitor management methods needed to mitigate human impacts on wilderness values. The plan will specify systems to monitor use and to detect adverse impacts.
Emergency Situations	Wilderness qualities may be adversely affected in situations involving human health and safety. Law enforcement agencies may use motor vehicles in emergencies; normal patrol would be barred, however.
Wildfires and Insect Epidemics	Tools and methods will be selected that will cause minimum degradation. Pre- and post-suppression methods are permitted, but should benefit wilderness.
Water Development Structures	New installations are subject to Presidential approval.
Recreation	Only minimum facilities necessary for protection of resources and health and safety will be allowed.
Timber Management	Management of the forest cover will be directed toward retaining the primeval character of the environment and allowing natural ecological processes to operate freely.

Chapter 3

Affected Environment

Chapter 3

AFFECTED ENVIRONMENT

INTRODUCTION

This chapter provides:

- A description of the environment as it presently exists to serve as a baseline for comparison with impacts projected in Chapter 4 for the Proposed Action and Alternatives.
- A description of only those components of the environment likely to be affected by implementation of the Proposed Action or Alternatives.
- No consideration of those components not likely to be significantly impacted, such as air quality.

Area-wide resources:

- Range
- Wild horses and burros
- Fish and wildlife
- Timber and woodland
- Cultural resources
- Soil and water
- Recreation
- Wilderness
- Minerals
- Threatened and endangered plants
- Social and economic conditions

GENERAL RESOURCE AREA-WIDE DESCRIPTIONS

Range

The Alturas Planning Area is located within the Great Basin province in most of the area and Cascade province on the western edge. Sagebrush scrub and northern juniper woodland are the major vegetative types that occur. The area receives moderate precipitation, from 8 to over 16 inches annually, influenced by topographic position and elevation. The growing season range is from 60 to 120 days. Natural vegetation has been influenced by natural and man-caused forces such as fire, suppression of fire, insects, grazing practices and the availability of seed sources of invasive plants.

Livestock forage value, or forage condition, on rangeland is determined by: the species present and the amounts of each (composition), and the productivity of a site. In the Planning Area, perennial grass species, whether native or seeded, have a greater forage value than any other type of

plant for livestock, primarily cattle. Some sites, as influenced by soil (depth, nutrient level, etc.), climate (precipitation level and season, temperature, etc.), and other factors can produce up to 2,600 pounds per acre of vegetation annually. Other sites produce as little as 200 pounds per acre. A site with very high value, or good condition for forage, would be a site producing over 1,000 pounds per acre per year of mostly perennial grasses. Conversely, a site producing less than 500 pounds per acre per year with few perennial grasses, as where trees, brush or annual grasses and forbs have invaded, would be of little forage value, or in poor condition for season long livestock grazing--although it may provide some spring grazing use.

Ecological range condition differs from forage condition as it is not based on a use, but rather on the comparison of existing vegetation on a site to the site's natural climax vegetation community. The following description of ecological range condition on range sites is taken from the Soil Conservation Service's Modoc County, California, Alturas Area Soil Survey, 1979:

> A range site is the product of all environmental factors responsible for its development.
>
> A plant community existing within a range site that has not undergone abnormal disturbance, is the potential, or climax, plant community for that site. Climax plant communities are not precise or fixed in their composition but vary, within reasonable limits, from year to year and from place to place.
>
> Abnormal disturbance such as overuse by livestock, excessive burning, erosion, or plowing results in changes in the climax plant community or even complete destruction if disturbance is drastic enough. When the range site has not deteriorated significantly under such disturbance, secondary plant succession progresses in the direction of the natural potential or climax plant community for the site.
>
> Four range condition classes are used to indicate the degree of departure from the potential, or climax, vegetation brought about by grazing or other uses. The classes show the present condition of the native vegetation on a range site in relation to the native vegetation that could grow there.
>
> A range is in excellent condition if 76 to 100 percent of the vegetation is of the same kind as that in the climax stand. It is in good condition if the percentage is 51 to 75; in fair condition if the percentage is 26 to 50; and in poor condition if the percentage is less than 25.
>
> When changes occur in the climax plant community due to use by livestock or disturbance, some plant species will increase, others will decrease. Species increasing or decreasing depends upon the grazing animal, season of use, and the degree of utilization. By comparing the composition of

the present plant community to the potential plant community, it is possible to see how individual species have increased while others have decreased. Plants not present in the climax community which show up in the present plant community are invaders for the site.

Range forage condition and ecological range condition are not measures of the same thing. Very good range forage condition may occur in a fair ecological range condition. Poor ecological range condition may provide a fair to good source of livestock forage during certain seasons. Excellent ecological range condition may not provide very good livestock forage on some sites.

Generally, grazing allotments in the Planning Area have either a spring or a summer season of use based on plant species and phenology and on the needs of the livestock operator. Spring seasons begin on or after April 1 and end in late May or late June based on the movement of livestock to higher elevation ranges on both Forest Service and BLM lands. Summer permits usually begin after May 1 and can last through October. There are a few exceptions (see TABLE 3-1).

Based on an early 1960's Range Survey, a mid 1960's adjudication of forage allocated to livestock was made to all allotments in the Planning Area. A substantial (37%) reduction in authorized AUMs was made, and 31,115 AUMs were placed into suspended nonuse status.

Ten Allotment Management Plans (AMPs) have been implemented and used for ten or more years in the Planning Area. These are discussed individually under each management area.

TABLE 3-1 lists by allotment the acres surveyed for ecological range condition and woodland, as derived from the 1981 Range Condition Inventory. Total acreage for each allotment as well as BLM acres are listed. The Selective Management category: C-M-I (see Chapter 2) is also listed along with the number of livestock operators using each allotment, the existing number and class of livestock (C = cattle, H = horses, S = sheep), season of use, and number of active AUMs per allotment.

Following are brief descriptions of the three dominant vegetative communities:

Annual Grasslands

Most of the acreage in MA 1 and portions of MA 5 and MA 7 are dominated by cheatgrass and medusahead. There are smaller areas of perennial grasses, but not in sufficient amounts to out-compete the annual grasses. These ranges are grazed in the early spring to utilize the annuals in their early, more palatable growth stage.

TABLE 3-1

Present Range Condition, Acreage, and Livestock Grazing Use

Allotment	MA	Surveyed Ecological Range Condition on Public Lands: Unsurveyed BLM Acreage	Excellent	Good	Fair	Poor	Woodland	BLM Acres	Total Acres	C/M/I Category	No. Users	No. Livestock	Season of Use	Active AUMs
S. Tablelands	1	0	0	1,059	8,288	6,228	429	16,004	17,558	M	3	1,001 C	04/16 - 06/30	2,504
N. Tablelands	1	772	0	320	18,182	3,846	0	23,120	23,726	I	4	1,692 C	04/16 - 06/30	4,010
W. Field	1	0	0	0	0	624	0	624	2,960	C	1	32 C	04/16 - 06/30	0
E. Field	1	0	0	0	2,902	962	0	3,864	4,496	M	1	50 C	04/16 - 06/30	467
Signal Butte	1	0	0	0	462	623	181	1,266	1,460	M	4	- N O T	L I C E N S E D -	0
Pine Creek Mesa	1	0	0	0	1,573	484	0	2,057	2,363	M	1	171 C	04/16 - 05/31	257
Fitzhugh Field	1	0	10	163	0	0	112	285	285	C	2	8 C	04/16 - 08/31	36
Pine Creek Field	1	0	0	0	245	105	0	350	496	C	1	12 C	04/16 - 08/31	18
Corbie Field	1	26	0	95	62	0	0	183	682	C	1	6 C	04/16 - 08/31	27
Dervin Field	1	0	0	211	37	0	133	381	928	C	1	7 C	04/16 - 08/31	32
West Fitzhugh	1	0	0	0	252	0	0	252	537	C	1	- N O T	L I C E N S E D -	0
Highway	1	80						80	80	C	1	4 C	11/01 - 11/30	4
Ryegrass	2	0	0	270	1,671	0	1,686	3,627	4,296	M	1	150 C	04/16 - 05/31	225
Portuguese	2	0	0	904	2,163	125	322	3,514	5,360	I	2	347 C	05/01 - 06/15	521
S. Graves	2	0	0	273	4,217	0	8,460	12,950	20,243	I	1	450 C	04/16 - 09/31	1,652
N. Graves	2	0	0	52	1,746	495	718	3,011	4,088	I	1	148 C	04/16 - 06/31	372
Mackey	2	0	0	154	453	115	168	890	1,427	I	1	26 C	04/16 - 06/30	49
Neer	2	0	0	211	148	0	652	1,011	3,097	C	1	11 C	04/01 - 10/31	80
West Side	2	0	0	697	1,331	24	119	2,171	2,910	I	1	63 C	04/01 - 05/31	129
Bailey Dorris	2	0	0	1,317	1,453	198	0	2,968	3,676	I	1	193 C	04/01 - 05/31	386
Cutoff	2	400						400	430	C	1	36 Y	04/16 - 05/31	41
Rocky Prairie	2	0	0	0	3,561	0	5,021	8,582	16,231	M	1	436 C	05/01 - 10/15	934
Flournoy Individual	2	0	0	233	170	0	1,098	1,501	5,115	C	1	56 C	04/16 - 09/15	70
Bacon	3	184						184	404	C	1	6 C	04/01 - 10/31	42
Strip	3	8,307						8,307	8,500	I	1	49 C	05/01 - 09/30	245
Fisher	3	628						628	1,878	C	1	4 C	04/01 - 10/31	28
Kelley	3	81						81	633	C	1	2 C	04/01 - 07/15	7
Rimrock	3	2,437						2,437	2,913	M	2	218 C	04/10 - 05/10	218
Black Canyon Rim	3	697						697	950	C	1	13 C	05/16 - 09/30	59
S-X	3	766						766	1,079	C	1	10 C	04/01 - 10/31	56
Stevens	3	240						240	240	C	1	- N O T	L I C E N S E D -	0
Stull	3	480						480	480	C	1	- N O T	L I C E N S E D -	0
Hastings	3	360						360	360	C	1	- N O T	L I C E N S E D -	0
X-L	3 [1/]	1,452	0	0	137	0	0	1,589	4,489	C	1	57 C	04/16 - 06/30	143
Capik	4	0	0	215	244	104	0	563	623	M	1	35 C	05/01 - 10/31	48
Christopher	4	137						137	1,010	C	1	10 C	05/16 - 06/15	10

TABLE 3-1 (continued)

Present Range Condition, Acreage, and Livestock Grazing Use

Allotment	MA	Surveyed Ecological Range Condition on Public Lands: Unsurveyed BLM Acreage	Excellent	Good	Fair	Poor	Woodland	BLM Acres	Total Acres	C/M/I Category	No. Users	No. Livestock	Season of Use	Active AUMs
Cloud	4	0	0	0	0	0	81	81	988	C	1	3 C	06/16 - 09/15	9
Russell Slough	4	0	0	124	759	69	0	952	1,544	M	1	173 C	04/16 - 10/26	119
Roberts Creek	4	10	0	0	184	0	0	194	439	C	1	2 C	05/01 - 10/31	12
Brunnemer	4	0	0	9	31	0	0	40	40	C	1	1 C	04/01 - 08/31	5
Gardner	4	12	0	284	44	0	0	340	1,252	C	1	6 C	04/01 - 09/31	23
Crowder	4	10	0	1,009	1,160	0	52	2,231	3,157	I	1	53 C	05/01 - 07/31	160
Lakeshore	4	385	0	38	137	0	0	560	943	C	1	20 C	04/16 - 05/01	10
Hagge	4	400						400	800	C	1	11 C	04/01 - 06/30	33
Hughes	4	360						360	760	C	1	50 C	04/01 - 06/31	24
Perry	4	33	0	119	0	0	0	152	1,266	C	1	24 C	05/01 - 05/31	24
Prock	4	531						531	2,393	C	1	29 C	04/16 - 06/15	58
Russell	4	36	0	83	0	0	0	119	244	C	1	4 C	04/01 - 05/31	8
Thoms Creek	4	24	0	0	289	0	0	313	313	C	1	46 C	04/16 - 05/31	69
Sternes	4	0	0	0	78	0	0	78	556	C	1	10 C	05/01 - 06/30	20
Brown Field	4	616						616	970	C	1	7 C	04/16 - 08/31	32
Porter Reservoir	4	160						160	160	C	1	15 C	04/16 - 05/15	15
Loomis	5	575						575	2,948	C	1	12 C	05/01 - 11/30	84
Chase Valley	5	2,340						2,340	2,686	I	4	180 C	04/16 - 05/31	201
Clark	5	157						157	157	C	1	4 C	05/01 - 07/31	12
Eicholz	5	189						189	7,359	C	1	9 C	04/01 - 06/30	27
Turner Canyon	5	790						790	1,412	C	2	73 C	04/01 - 05/15	110
Haury	5	814						814	1,626	C	1	100 C	04/16 - 05/15	64
Hitchens	5	2,296						2,296	4,330	C	1	25 C	04/16 - 11/15	175
Hayes Spring	5	651						651	801	C	2	104 C	04/01 - 06/15	103
Hines	5	326						326	697	C	1	13 C	04/01 - 06/30	39
Major	5	481						481	481	C	1	49 C	04/16 - 05/30	73
S. Juniper	5	481						481	492	C	1	64 C	04/16 - 04/30	32
Knudson	5	242						242	242	C	1	9 C	05/16 - 09/15	36
Kramer	5	821						821	1,554	C	1	200 C	04/16 - 05/30	125
Dibble Hill	5	485						485	1,305	M	1	28 C	04/16 - 05/15	28
North Dibble	5	544						544	751	C	1	35 C	09/01 - 10/31	53
Harper Hill	5	0	0	71	199	0	263	533	2,186	C	1	18 C	04/16 - 09/30	86
Barber Canyon	5	388						388	623	C	1	- N O T L I C E N S E D -		0
Radio Hill	5	80						80	80	C	1	2 C	09/01 - 10/31	4
Reclamation	5	0	0	0	163	0	0	163	210	C	1	11 C	04/16 - 05/30	16
South Barber	5	0	0	0	80	0	0	80	80	C	1	- N O T L I C E N S E D -		0

TABLE 3-1 (continued)

Present Range Condition, Acreage, and Livestock Grazing Use

Allotment	MA	Surveyed Ecological Range Condition on Public Lands: Unsurveyed BLM Acreage	Excellent	Good	Fair	Poor	Woodland	BLM Acres	Total Acres	C/M/I Category	No. Users	No. Livestock	Season of Use	Active AUMs
Round Valley	5	0	0	0	228	0	0	228	304	C	1	25 C	04/16 - 10/31	61
Indian Peak	5	655						655	1,105	C	1	8 C	04/16 - 09/30	44
Howell Canyon	5	312						312	1,200	C	1	- N O T	L I C E N S E D -	0
Mamath	5	605						605	2,278	C	1	31 C	04/01 - 05/15	46
N. Juniper	5	1,728						1,728	1,974	C	1	105 C	04/01 - 06/15	263
Monchamp	5	86						86	89	C	1	2 C	05/01 - 07/30	6
Myers	5	155						155	284	C	1	2 C	04/16 - 10/31	13
Barrows	5	714						714	2,974	M	1	47 C	04/16 - 06/30	69
Butte Creek	5	443						443	527	C	1	41 C	04/16 - 05/16	42
Piper	5	73						73	312	C	1	2 H	04/16 - 09/15	10
Roberts Reservoir	5	1,062						1,062	2,958	C	1	12 C	05/01 - 08/15	43
Roberts Individual	5	320						320	481	C	1	61 C	04/16 - 05/15	61
Pilot Butte	5	140						140	275	C	1	30 C	05/01 - 06/15	21
Big Valley Mountain	6 [2/]	0	0	0	0	0	4,137	4,137	4,137	C	1	40 C	04/16 - 06/15	80
Babcock	7	0	0	0	0	0	551	551	2,641	C	2	20 C	04/16 - 06/16	40
W. Beaver Creek	7	505	0	105	5,637	82	1,042	7,371	7,902	I	3	223 C	04/16 - 06/30	558
Dixie Valley	7	0	0	538	5,830	5,419	4,545	16,332	23,066	I	1	740 C	04/01 - 12/30	1,291
Bald Mountain	7	0	0	322	2,885	792	2,263	6,262	8,081	I	1	261 C	04/17 - 05/30	392
Avery	7	0	0	0	122	0	0	122	122	C	1	25 C	05/01 - 05/30	18
E. Beaver Creek	7	342	0	0	186	2,019	624	3,171	3,979	I	1	504 C	04/16 - 05/31	756
Bend	7	0	0	0	686	0	0	686	1,406	C	1	33 C	04/16 - 05/31	50
Thompson	7	0	0	352	2,309	0	2,280	4,941	6,802	I	1	502 C, 6 H	04/01 - 10/31	613
Muck Valley	7	4,915	0	226	120	1,548	4,845	11,654	20,090	I	1	343 C	05/04 - 08/15	1,371
Plantation	7	0	0	0	120	226	1,097	1,443	1,540	I	1	267 C	04/16 - 05/15	267
Dixon Hill	7 [3/]	320						320	640	C	1	30 C	05/16 - 06/30	30
Muck Valley	8 [3/]	0		307	2,872	1,118	2,038	6,335	6,335	- S E E	A L L O T M E N T	S U M M A R Y	I N	MA 7 -
E. Beaver Creek	8 [3/]	0				525		525	525	- S E E	A L L O T M E N T	S U M M A R Y	I N	MA 7 -
River Pasture	8 [3/]	0		120	715	59	2,391	3,285	5,474	I	1	190 C	04/17 - 05/30	285
Thompson	8 [3/]	160			400		40	600	600	- S E E	A L L O T M E N T	S U M M A R Y	I N	MA 7 -
Round Barn	8	830						830	1,740			- N O T	L I C E N S E D -	0
Termo/Lane	9	0	3,861	0	2,518	0	0	6,379	14,120	I	1	574 C	06/10 - 10/20	531
Lower Highway	9	636						636	636	C	1	80 C	06/01 - 06/30	160
Fillman-Diablo	10	599	130	546			349	1,624	5,504	C	1	30 C	05/01 - 09/30	150
Silva Flat	10	0	0	7,824	4,254	30	2,642	14,750	18,097	M	4	290 C, 4 H	05/01 - 09/30	1,249
Daisy Dean	10	0	0	290	7	0	177	474	609	C	1	17 C	05/16 - 09/30	80
Hencraft	10	0	0	439	94	0	684	1,217	10,914	C	1	31 C	05/15 - 09/05	154

TABLE 3-1 (continued)

Present Range Condition, Acreage, and Livestock Grazing Use

Allotment	MA	Surveyed Ecological Range Condition on Public Lands: Unsurveyed BLM Acreage	Excellent	Good	Fair	Poor	Woodland	BLM Acres	Total Acres	C/M/I Category	No. Users	No. Livestock	Season of Use	Active AUMs
Cold Springs	10	774	84	12,823	3,681	0	316	17,678	18,839	I	1	468 C	05/01 - 10/15	2,157
Cramer	10	645						645	987	C	1	9 C	04/16 - 08/15	36
Marr	10	73						73	219	C	1	1 C	04/16 - 08/15	4
Crabtree	10	340						340	660	C	1	27 C	05/01 - 10/15	15
South McDonald	10	1,059	1,428	4,531	4,230	12	0	11,260	11,990	I	2	255 C	04/16 - 10/30	1,616
McDonald Mountain	10	466	0	2,423	7,196	0	2,191	12,276	14,126	I	1	401 C	04/16 - 10/30	2,608
Coffin	10	586	0	0	711	0	0	1,297	2,217	C	1	10 C	04/16 - 10/30	70
Brockman	10	0	0	70	484	0	433	987	5,880	C	1	20 C	04/16 - 10/30	130
Hall Field	10	0	0	1,257	0	0	0	1,257	2,510	M	1	59 C	04/16 - 09/15	192
Dry Cow	10	0	0	5,203	0	0	0	5,203	6,338	I	1	216 C	05/16 - 10/20	1,103
Mitchell Hill	10	0	0	2,672	3,103	0	1,800	7,575	8,041	I	4	179 C	04/16 - 09/15	867
Tule Lake	10	542	1,914	17,938	20,043	268	8,185	48,890	59,783	I	6	1,925 C	05/01 - 09/30	9,054
Deep Canyon	10	1,570	0	370	63	0	395	2,398	4,812	C	1	45 C	04/16 - 09/15	225
Warm Springs	10	0	0	606	341	0	156	1,103	4,114	M	1	76 C	04/16 - 08/15	128
Nelson Corral	10	2,556	0	4,469	5,486	0	856	13,367	16,881	M	1	542 C	05/16 - 09/20	2,256
South Fork	10	0	0	422	866	0	2,516	3,804	5,649	M	1	261 C	05/01 - 09/15	1,175
North Ash Valley	10	0	4,104	7,712	1,826	0	3,539	17,181	25,577	I	2	571 C	04/16 - 09/30	2,505
South Ash Valley	10	0	2,481	2,057	3,746	0	8,540	16,824	21,557	I	1	406 C	05/15 - 09/15	1,624
Anderson	10	0	0	499	376	0	0	875	1,465	I	1	17 C	04/16 - 09/30	90
Wing	10	0	0	1,681	52	0	428	2,161	6,154	C	1	1,000 S	05/16 - 10/25	372
Dry Valley	10	0	0	871	377	0	1,052	2,300	5,447	C	1	113 C	04/16 - 09/30	273
Said Valley	10	0	23	406	25	0	372	826	1,881	I	1	130 C	08/25 - 09/06	60
Summit/Williams	10	0	112	30	735	0	958	1,835	7,826	C	1	28 C	05/01 - 09/30	140
Clarks Valley	10	115						115	935	C	1	6 C	05/01 - 09/30	30
Owl Creek	11	240						240	240			- N O T	L I C E N S E D -	0
Milk Creek	11	120						120	120			- N O T	L I C E N S E D -	0
Granger	11	1,300						1,300	1,300	C	1	20 C	04/15 - 05/30	30
Cedar Creek	11	440						440	440			- N O T	L I C E N S E D -	0
McCulley	11	1,000						1,000	1,000	C	1	10 C	05/01 - 06/30	20
Soldier Creek	11	40						40	40			- N O T	L I C E N S E D -	0
Mill Creek	11	40						40	40			- N O T	L I C E N S E D -	0
Goose Creek	11	40						40	40	C	1	2 C	05/01 - 09/30	10
Buck Mountain	11	120						120	120	C	1	10 H	04/01 - 10/31	19
Upper Lake	11	0	0	0	0	720	0	720	720	C	1	50 C	05/01 - 07/30	
												9 C	08/01 - 09/30	168

TABLE 3-1 (continued)

Present Range Condition, Acreage, and Livestock Grazing Use

Allotment	MA	Surveyed Ecological Range Condition on Public Lands: Unsurveyed BLM Acreage	Excellent	Good	Fair	Poor	Woodland	BLM Acres	Total Acres	C/M/I Category	No. Users	No. Livestock	Season of Use	Active AUMs
Fandango	11	1,000						1,000	1,000	C	1	93 C	04/15 - 05/15	
												47 C	09/01 - 09/30	140
South Bidwell	11	300						300	300	C	1	26 C	04/01 - 04/30	26
Bidwell Creek	11	80						80	80			- N O T	L I C E N S E D -	0
Bidwell	11	40						40	40	C	1	2 H	04/15 - 09/30	8
Isolated Tracts		6,267						6,267	6,267					
TOTAL - 138 Allotments		65,637	14,147	85,020	134,745	26,820	80,937	401,826	591,724		168	18,303		50,464

1/ X-L Allotment is divided by Highway 395 between MA 3 and MA 4. (80 AUMs and 63 AUMs, respectively.)
2/ Big Valley Mountain Allotment is in MA 6 and MA 7.
3/ Portions of Muck Valley, Thompson, and E. Beaver Creek are in MA 7 and MA 8.

Perennial Grasses/Sage

The remaining MAs not mentioned under Annual Grasslands are covered predominately by perennial grasses, low sage, and big sage with smaller inclusions of annual grasses. The longer season of palatability of these perennial grasses to livestock allows a longer season of use.

Mountain Shrubs

All MAs contain communities of mountain shrubs important to wildlife species. Some of the shrub communities are extensive and diverse while other areas have remnant populations due to factors such as overshadowing and excessive water draw by invading junipers, intensive grazing pressures, and wildfire. Shrubs important to wildlife and livestock include bitterbrush, snowberry, chokecherry, and bitter cherry.

Ecological range condition for the Planning Area is as follows:

Classes	Acres
Poor	26,100
Fair	134,745
Good	85,020
Excellent	14,147
Woodland	80,937
Unsurveyed	54,610
Isolated Tracts	6,267
TOTAL	401,826*

* MA 11 acreage not shown in this Table (see Table 3-1).

Wild Horses and Burros

One herd of more than 150 wild horses and burros, part of the East Herd Unit, resides in the Strip Allotment. The herd is presently cooperatively managed with the Modoc National Forest Service as outlined in the Devils Garden Plateau Wild Horse Management Plan.

Fish and Wildlife

The planning area contains approximately 225 species of birds and numerous mammals, reptiles, and amphibians to bring the total wildlife species count to over 300. Only certain key species and their habitats are accounted for in management actions and thus given consideration in this plan. These habitats include critical deer winter range, antelope winter range, migration routes, and kidding grounds, sage grouse strutting grounds, sport and native fisheries habitats, and all raptor habitat including Bald Eagles and Swainson's Hawks.

Mule Deer

The Alturas Planning Area supports portions of three deer herds (MAP 3-1). The Warner Mountain herd contains approximately 7,000 animals which utilize public lands primarily as wintering habitat. The Adin herd, which is largely unstudied, utilizes higher elevation forest land and winters on public lands in Big Valley and scattered parcels north of Adin. The Day Bench herd winters on the far western edge of the Planning Area and is a component of the Glass Mountain herd. This Day Bench herd is particularly critical due to lagging fawn production of approximately 10 per 100 does compared to approximately 35 to 40 in other herds in California Department of Fish and Game Region One. As expected, winter fawn losses are around 50 percent. Constricted migration corridors from residential development has been identified as a key problem with this herd. Other deer herd segments with relatively small migration patterns occur at MacDonald Mountain, Likely Mountain, and Tule Mountain.

Pronghorn Antelope

Approximately 3,000 of the nearly 7,000 antelope in northeastern California utilize public lands in the planning area in three subherds (MAP 3-2). Winter range for the entire Likely Tables subherd, the largest subherd, containing 2,250 animals, is contained in MAs 1, 2, and 3. This area is also utilized as summer range, though many of these animals summer on the Devil's Garden (U.S. Forest Service land). The Big Valley subherd utilizes public lands in the Big Valley, Dixie Valley, and Muck Valley portions of MAs 5 and 7. Most public lands here are utilized as winter and summer range for 600 to 1,200 animals. The Lassen subherd is a large herd of 1,400 animals which utilizes a small portion of the Planning Area as summer range in the Madeline Plains and Silva Flat areas.

Sage Grouse

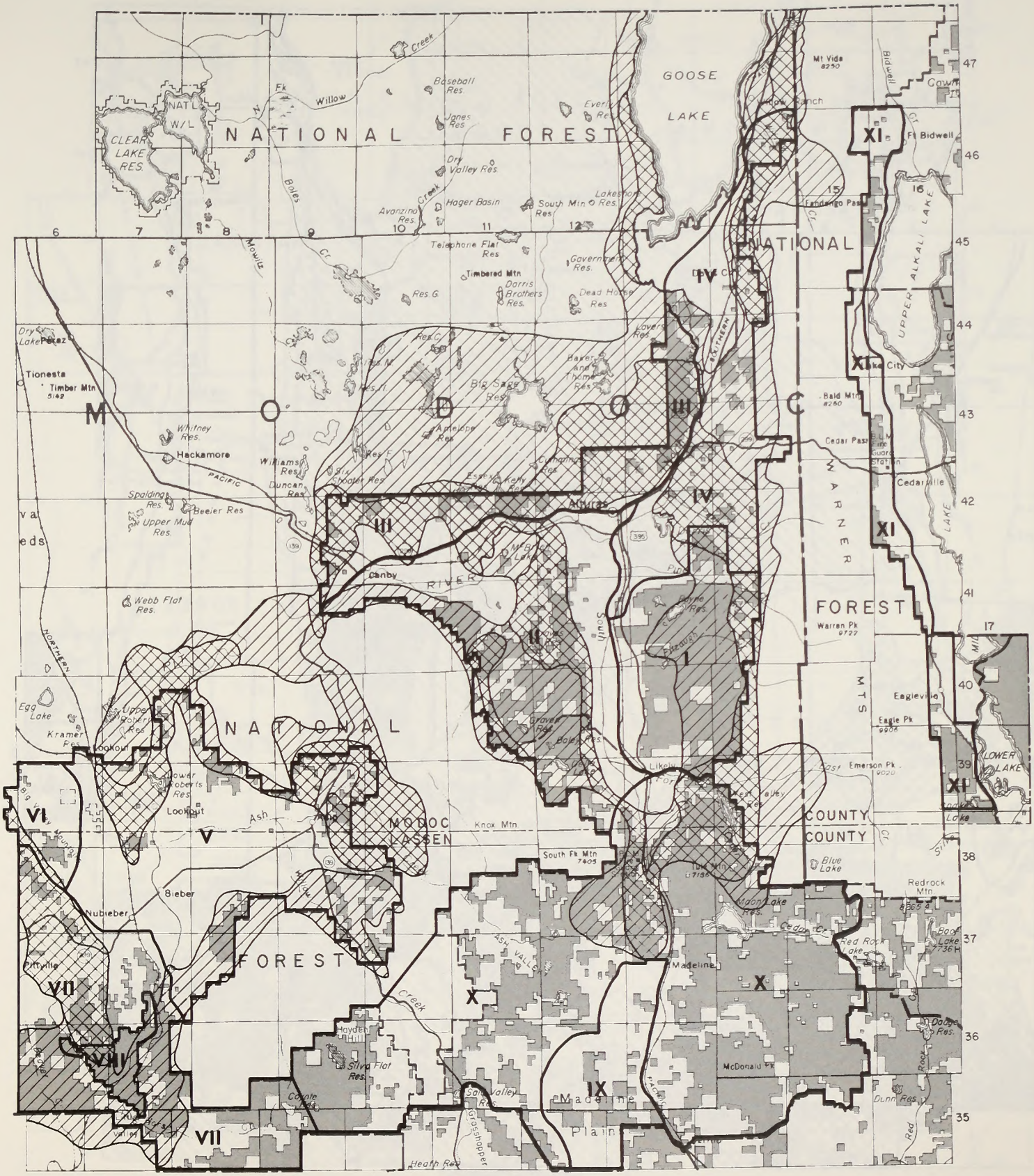
MAP 3-3 shows the distribution of sage grouse within the Planning Area. Population estimates are not available at this time. Some reduction in active strutting areas does seem to be occurring as a result of human encroachment; however, populations still remain at viable levels.

Southern Bald Eagle

No nesting occurs within the Planning Area though significant populations winter in MAs 3, 4, and 5.

Waterfowl

Good resident populations of ducks and geese utilize lakes and reservoirs throughout the Planning Area. Reproductive success is limited by lack of cover and isolated incubation and brood-rearing sites at many reservoirs. Fluctuating migrant populations reflect habitat conditions in other breeding areas.



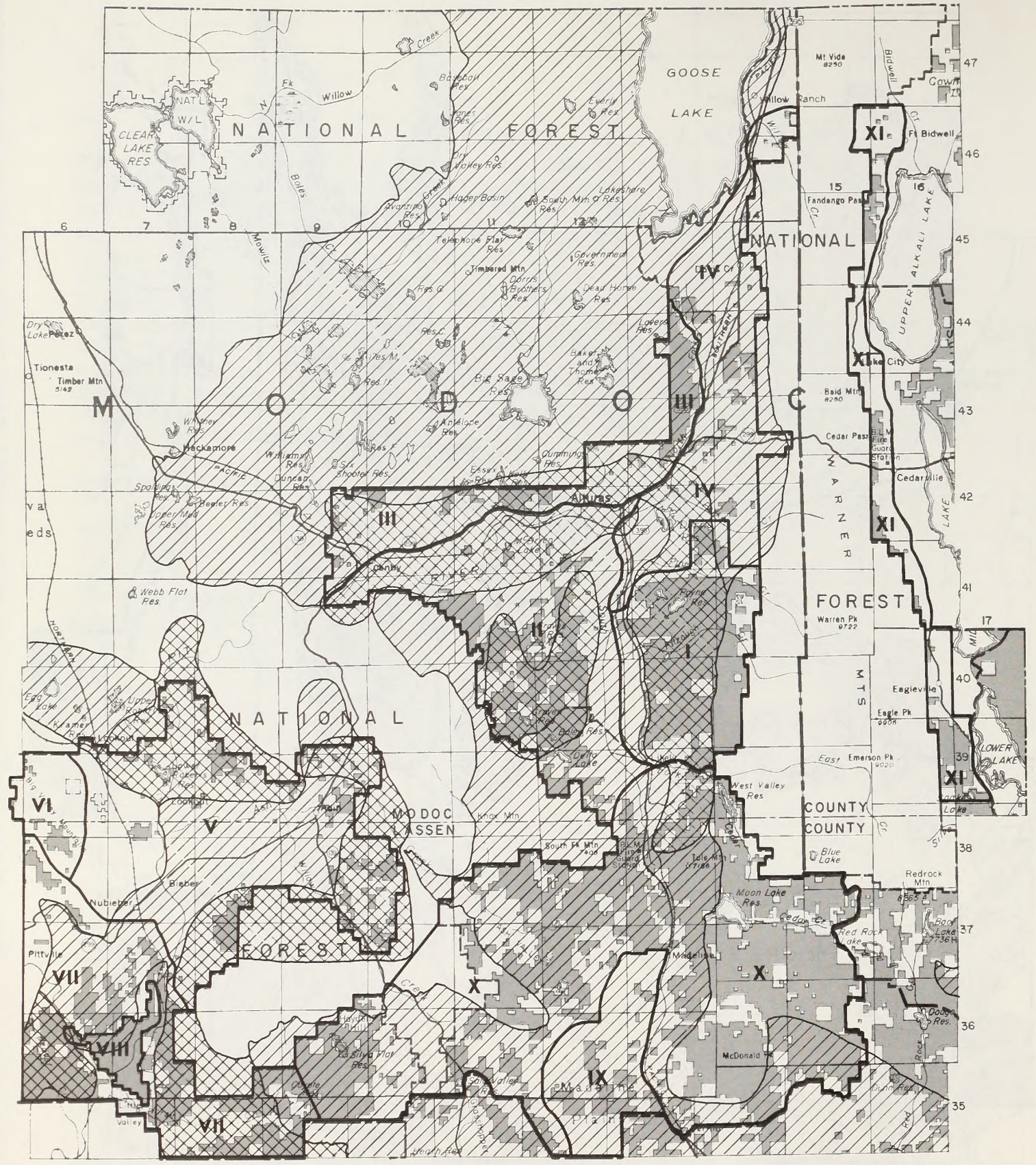
Legend

- Management Area Boundary
- Deer Winter Range
- Critical Deer Winter Range

ALTURAS PLANNING AREA

DEER WINTER RANGE

Map 3-1



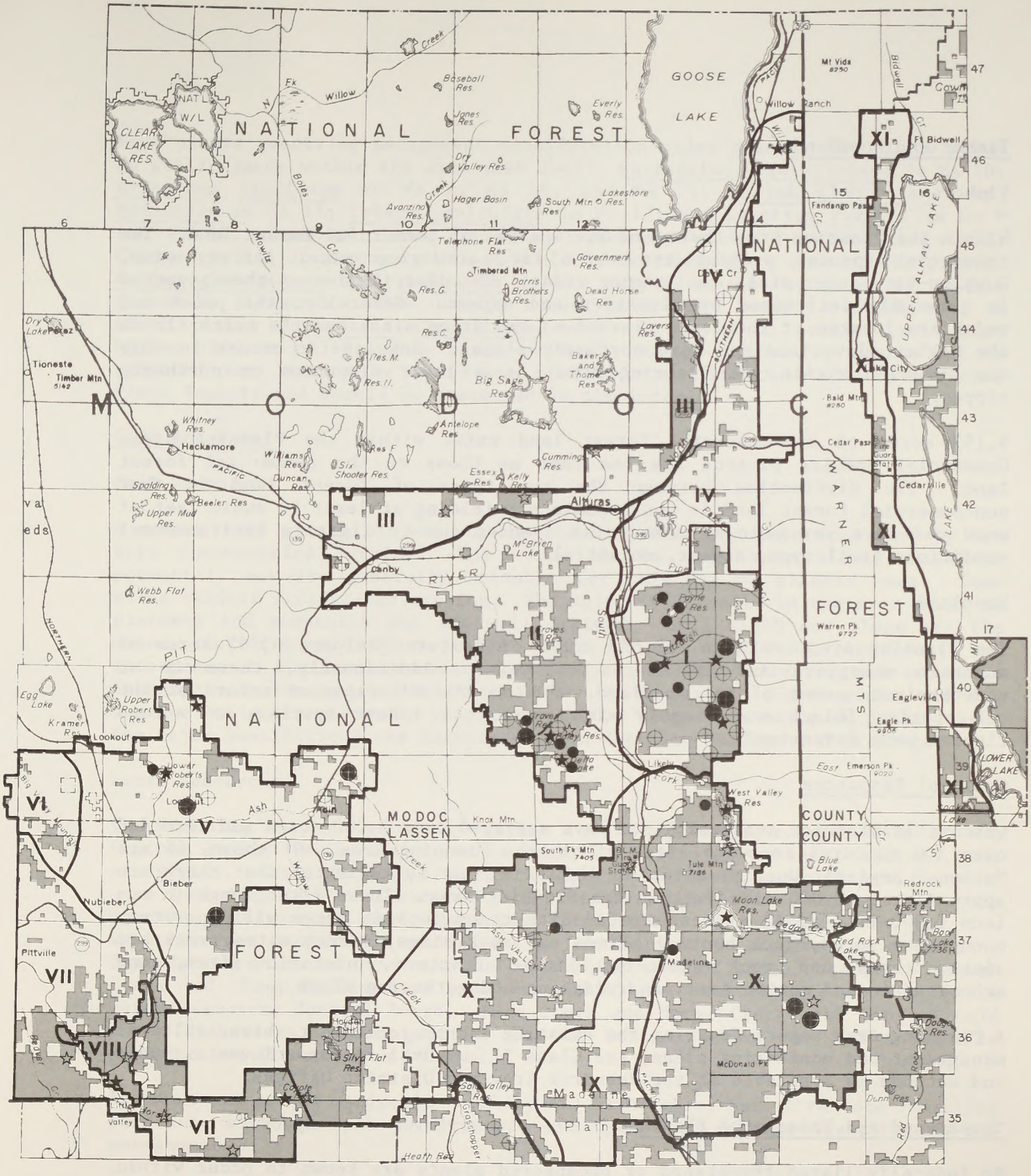
Legend

- Management Area Boundary
- Yearlong Range
- Winter Range

ALTURAS PLANNING AREA

PRONGHORN ANTELOPE HABITAT

Map 3-2



Legend

- Management Area Boundary
- ⊕ – Sage Grouse Historic Strutting Ground
- ● – Sage Grouse Active Strutting Ground
- ★ – Sport Fishery
- ☆ – Native Fishery
- ● – Waterfowl Habitat

Graphic Scale
0 2mi. 4mi. 6mi. 8mi. 10mi.

N

Map 3-3

ALTURAS PLANNING AREA

MISCELLANEOUS WILDLIFE HABITAT

Timber and Woodland

Timber

Within the Planning Area there are 5,124 acres of commercial forest land. The commercial species present are white fir, ponderosa pine, jeffrey pine, Douglas-fir, sugar pine, and incense cedar. The distribution of these species is generally determined by elevation and aspect. Generally, the pines and cedar are located at the lower elevations and drier sites and the white fir at the higher elevations and more northerly slopes. Douglas-fir occurs in only one location within the Planning Area, at a lower elevation on northerly slopes.

9,153 acres of noncommercial forest land exist within the Planning Area. Commercial species present are the same as those on the commercial forest land. The distinction between the two types of forest land is that noncommercial forest land is not capable of yielding at least 20 cubic feet of wood per acre per year of commercial species due to limiting environmental conditions (soil type, aspect, moisture).

Woodland

The Planning Area contains 125,873 acres of western juniper, 6,783 acres of mountain mahogany, and 125 acres of aspen. Additionally, there is an undetermined amount of oak woodland. Due to the interspersed nature of the oak species (black and Oregon) with commerical forest species, no acreas figures were determined.

Cultural Resources

Susanville District archaeologists have surveyed over 3,000 acres and recorded over 300 cultural resource sites within the Planning Area. Of these, 45 are National Register Quality sites or districts. It is estimated that there are approximately 2,000 sites within the Planning Area. These sites range in age from 6,000 B.C. until present time. Site types include large village sites, occupation sites, rock hunting blinds and rock rings, midden sites, rock art sites, caves and rock shelters, lithic scatters, historic sites, and ethnographic and native American religious and gathering sites.

A Planning Area report covering the existing and projected data base, cultural management and monitoring plans, and Class II cultural resource inventory data and methods is available at the Resource Area and District Offices.

Threatened and Endangered Plants

No federally listed threatened or endangered plants are known to occur within the Alturas Planning Area.

Five plants requiring management consideration under present BLM policy occur on public lands within the area (MAP 3-4): Astragalus tegetarioides in MA 10; Eriogonum prociduum in MA 2, MA 10, and MA 11; Galium glabrescens ssp. modocense in MA 11; Ivesia paniculata in MA 10; and Lomatium ravenii in MA 9 and MA 10. None of these are being adversely affected by existing uses. Changes in use or intensity of use would be detrimental to some of the plants. Galium glabrescens spp. modocense is the only plant of the group noticeably grazed by livestock. This usually occurs only under heavy livestock use. A sixth plant, Antennaria flagellaris, was discovered on public lands near Hayden Hill in MA 10. This plant presently has no protective status but is proposed for listing by the State of California and the California Native Plant Society and should be protected in the interim.

Soil and Water

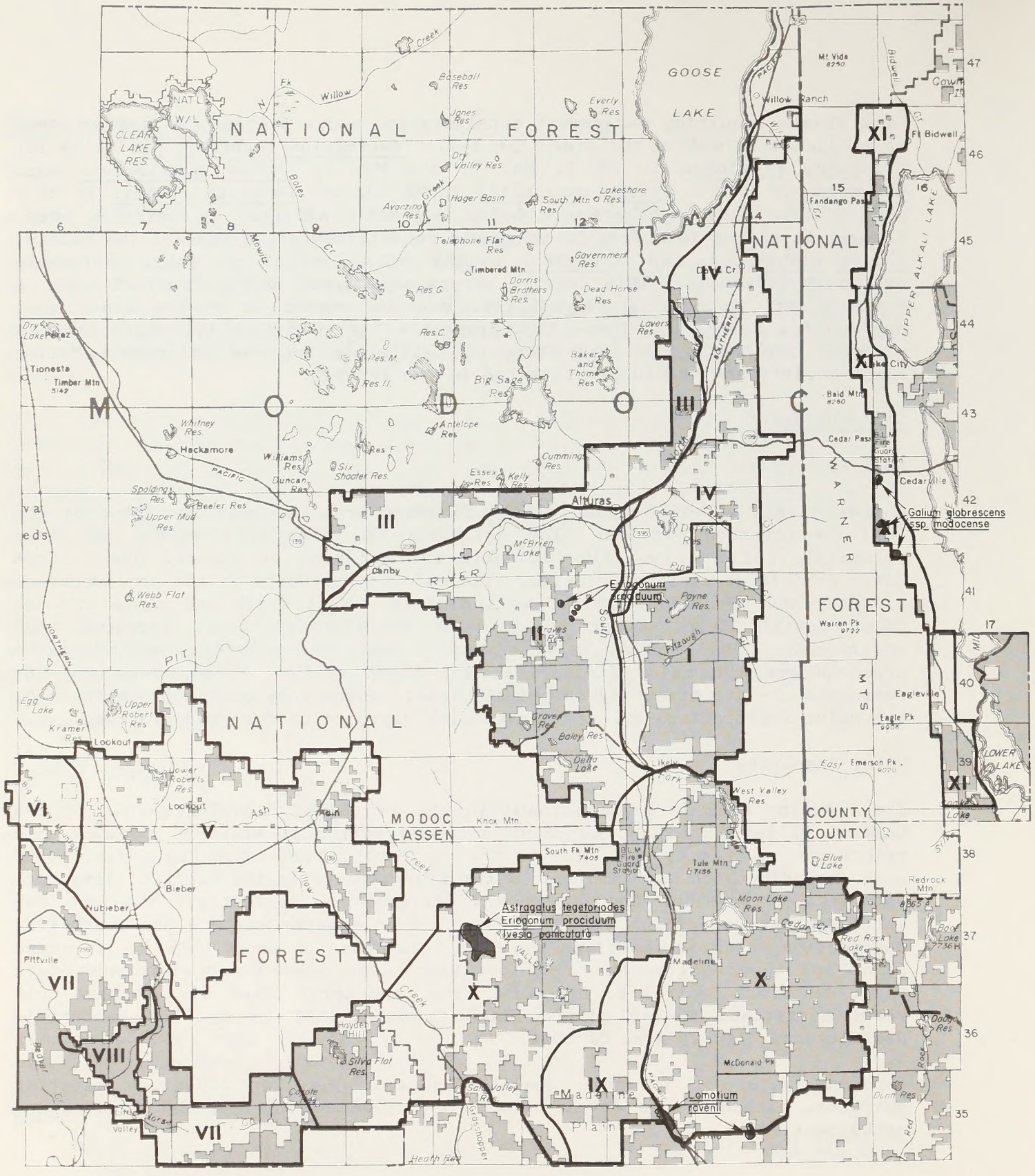
Soil Resources

A modern soil survey of most of the Planning Area has been completed by the Soil Conservation Service. The soils in the area vary widely in their potential, but are generally suitable for existing or planned uses. Some sites exhibit accelerated erosion. The majority of soils in the area occur on plateaus and mountains and are well drained. Soil depth and slope are the major restrictions. Other soils occur on alluvial fans, terraces, and escarpments. Shallowness, heavy textures, restrictive layers, and excessive drainage are the major limitations for those soils. Flood plain and low terrace soils are primarily on private land. Where they occur on public land, the major restrictions are associated with depth to hardpan and drainage.

Water Resources

The Planning Area is primarily within the Pit River Hydrologic Unit of the Central Valley Basin and contains numerous perennial streams, springs, and reservoirs. Water flowing from or through public lands supports a variety of uses including both warm and cold water fisheries, wildlife habitat, livestock watering, recreation, and downstream irrigation. Currently, only the few water sources supporting meadow systems and cold water streams are exhibiting degradation which is impacting the beneficial uses of those waters. Fitzhugh Creek and Sheep Valley have problems which have been reported to the State Water Resources Control Board. Pine Creek and Horse Creek also support cold water fisheries. Water quality data is maintained in the BLM Susanville District and Alturas Area Offices.

Abundant water of suitable quality is available for livestock watering purposes, although some developments are needed to enhance distribution and management.



Legend

- Management Area Boundary
- Threatened or Endangered Plant Location

ALTURAS PLANNING AREA

THREATENED AND ENDANGERED PLANTS

Map 3-4

Recreation

Recreational use is widely dispersed throughout the Planning Area. Reservoirs and creeks provide a variety of fisheries. Mule deer, pronghorn antelope, sage grouse, and upland game species attract hunters from late August through January. OHV use is scattered throughout the area and is most often associated with hunting and fishing activities. Visitor use days in 1981 totaled 151,500; hunting, camping, and OHV use - 148,000 days; fishing - 3,500 days.

Wilderness

The Alturas Planning Area contains two WSA's totaling 28,525 acres of public land (MAP 3-5):

MA	WSA No.	Name	Acreage
8	CA-020-103	Pit River Canyon	11,575
10	CA-020-211	Tule Mountain	16,950

Population Centers

Two Standard Metropolitan Statistical Areas (SMSAs - see Glossary for a definition) fall within a one day drive (5 hours) of these wilderness study areas.

SMSA:	Sacramento
	Reno

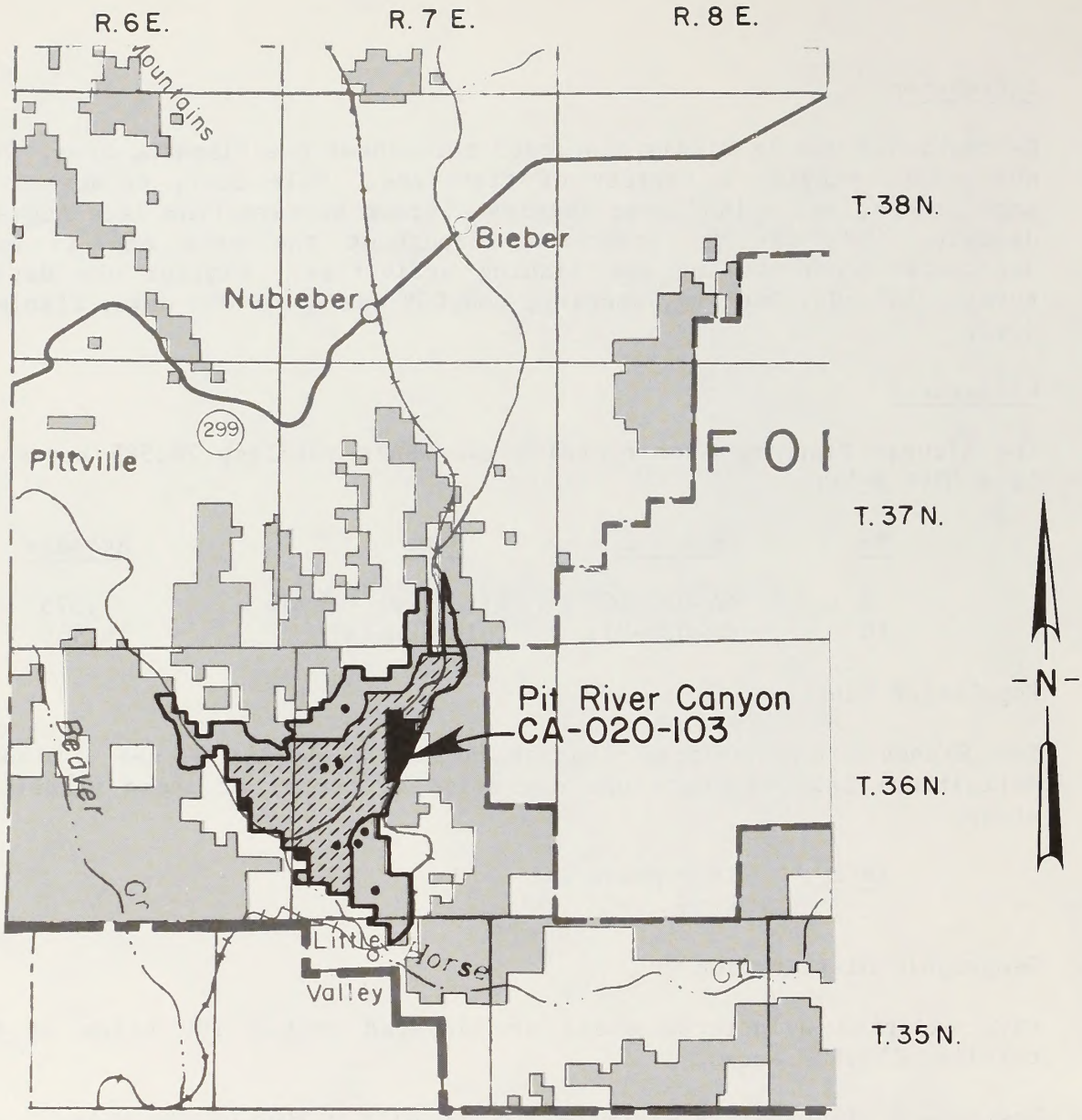
Geographic Distribution

Five existing wilderness areas are located within 100 miles of the WSAs, totaling 239,507 acres.

Designated wilderness areas within a 100 mile radius of the WSAs:

Name	Administering Agency	Size
Caribou	USFS	18,825
Lassen Volcanic NP	NPS	78,982
Lava Beds NM	NPS	56,920
South Warner	USFS	68,445
Thousand Lakes	USFS	16,335

In addition, there are a large number of administratively endorsed wilderness study areas and other study areas that fall within a 100-mile radius of the Planning Area. There are 26 administratively endorsed wilderness study areas totaling 713,341 acres. In addition, there are 32 BLM WSAs totaling 1,719,823 acres within a 100-mile radius of the Planning Area.



Graphic Scale

0 2mi. 4mi. 6mi.

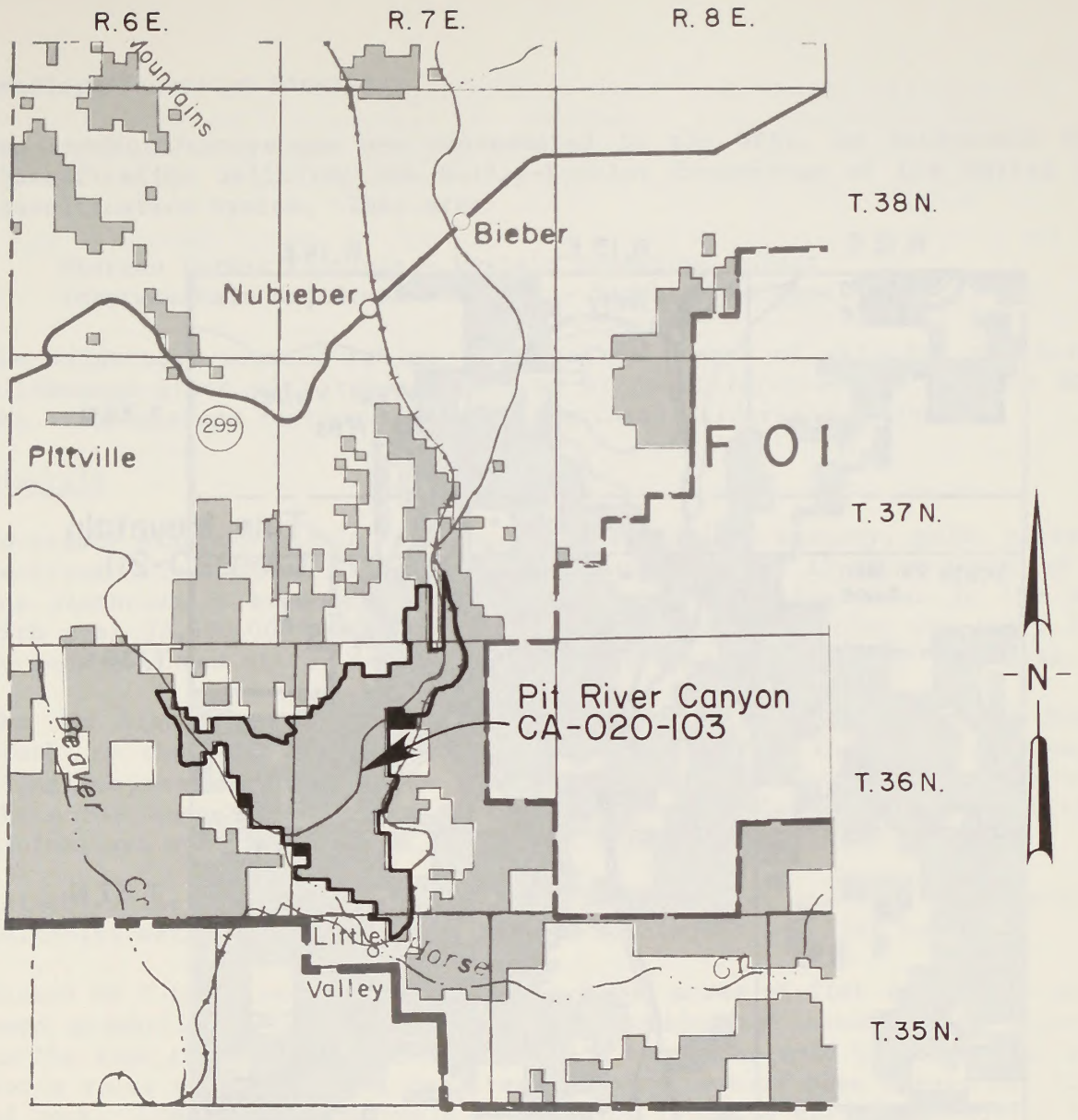
Legend

- **Reservoir**
- **Wilderness Study Area Boundary**
- **Preferred Alt:**
  - Acquisition Parcel
  - Proposed Wilderness Parcel

ALTURAS PLANNING AREA

WILDERNESS STUDY AREAS

Map 3-5



Graphic Scale

0 2mi. 4mi. 6mi.

Legend

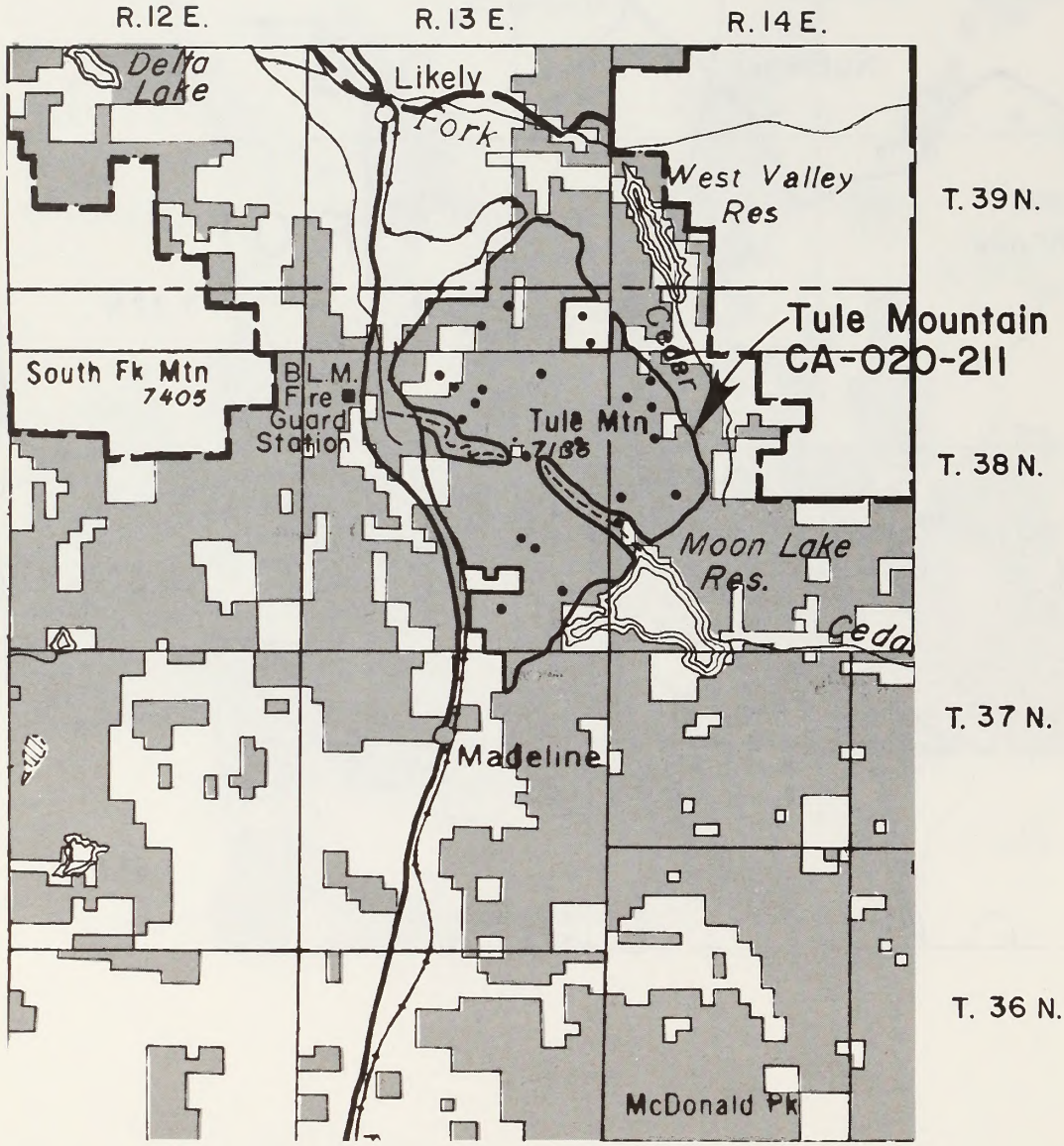
Wilderness Study Area

Alternative III

ALTURAS PLANNING AREA

WILDERNESS STUDY AREAS

Map 3-6



Graphic Scale

0 2mi. 4mi. 6mi.

Legend

- **Reservoir**
- **Wilderness Study Area**
- **Cherry-Stemmed Roads**

ALTURAS PLANNING AREA

WILDERNESS STUDY AREAS

Map 3-7

Landform/Ecosystem Diversity

Two landform/ecosystems are represented in the WSAs, as determined through classification utilizing the Bailey-Kuchler Ecosystems of the United States classification system. They are:

Sierran Forest Province - Western Ponderosa Forest
Intermountain Sagebrush Province - Sagebrush steppe

The wilderness summary tables indicate the number of existing and potential wilderness areas with representatives of landform/ecosystem of each WSA and the total acreage represented in the National Wilderness System.

Minerals

Locatable minerals within the Planning Area include mercury, gold, silver, and zeolites. The Hayden Hill Mining District, located 15 miles south of Adin, has historically been one of the most important mining areas in the region, with over $2,500,000 in gold and silver ore removed during the early 1900's. Current gold and silver exploration continues to be active in this area.

The old Highgrade Mining District, eight miles south and east of New Pine Creek, is the only other notable mineral area within the Planning Area. The Highgrade area was an active gold producer in the late 1800's. Currently, there has been renewed interest in the area. Other hard rock activity is minimal and widely dispersed throughout the Planning Area.

Saleables include pumice, cinders, decorative stone, and sand and gravel. The saleables activity is primarily limited to cinders and flat rocks.

Within MA 7 there exists approximately 8,000 acres of flat rock. The stone is used primarily in small commercial and residential construction industries. In the last three years, 163 tons of rock have been sold by commercial permits for a value of $1,530; and two free-use permits have been issued for 2.5 tons of rock. Long-term needs would be met from from the existing resource base.

Three cinder pits are located within MA 7; Day, Round Barn and Babcock. Primary users are local county and State governments. To date, they have been issued 10-year free-use permits to excavate cinders for use on public works projects. Within the past three years, BLM has also issued 50 permits for 16,665 cubic yards of cinder worth $3,854 to private individuals and eight free-use permits to community improvement groups for 1,408 cubic yards.

Sixty-three noncompetitive oil and gas leases for 104,820 surface and 39,140 split estate acres have been issued. Ten additional oil and gas lease applications have been received for 10,890 surface and 5,380 split estate acres. No Known Gas Structures (KGS) occur within the Planning Area.

Five noncompetitive geothermal lease applications for 11,060 surface and 680 split estate acres have been received. One noncompetitive lease has been issued for 520 acres. One Known Geothermal Resource Area (KGRA) exists within the Planning Area. One lease has beem issued for 440 acres.

No development has taken place within the oil, gas or geothermal leased areas.

Social and Economic Conditions

Communities within the Planning Area depend largely on the livestock and lumber industries for economic base and lifestyle. Hunters, fisherman, and campers from other areas have a positive economic impact on the local communities during the appropriate seasons. Public lands provide important spring and summer range for many livestock operators.

The Planning Area lies in Lassen and Modoc Counties. A majority of the land base and livestock AUMs are in Lassen County with a population of about 21,700 people (1980). Lassen County has one incorporated city, Susanville (population 6,520) which is relatively distant (80 miles) from the Planning Area. In 1981 the gross agricultural production of Lassen County was about $34 million, of which $10 million or 29 percent was livestock production. There are approximately 73,000 cattle in the county. The Lassen County public lands in the Planning Area supply 35,896 AUMs.

Modoc County has a population of about 8,600 people (1980). It has one incorporated city, Alturas (population 3,025) which is the main trade center for the Planning Area. In 1981 the gross agricultural production of Modoc County was about $75 million, of which 27 percent or $20 million was livestock production. There are about 79,000 cattle in the county. The Modoc County public lands in the Planning Area supply 14,568 AUMs.

Ninety-nine permittees use 50,464 AUMs of livestock forage from public lands. This is equivelant to enough feed for about 4,200 cattle year round, or about 3 percent of the cattle in Lassen and Modoc Counties combined.

Most permittees operate cow-calf ranches where the primary production is yearling calves and a reliable source of feed is needed both year round and from year to year. Many of the permittees have more than one BLM allotment in the Planning Area.

Since 1978 the sale of timber from public lands within the Planning Area has accounted for less than 0.01 percent total timber harvest. (Area Analysis for SYU-15, BLM 1979.) The major timber supplier is the U.S. Forest Service. Due to the variation in timber sales from public lands (TABLE 3-3) no particular mill or community can be said to be dependent on BLM timber supplies in the region. Over the past five years, the volume sold has varied from 30 thousand board feet to 2.0 million board feet per year.

The forest products industry employs about 800 people in the region. It has been estimated that 5.7 people are employed in the logging and forest products industries for each million board feet of timber harvest (BLM, Redding District 1978, Social-Economic Profile). If the projected allowable cut of 570 MBF per year is maintained, about 3 jobs in the logging and forest products industries in the region would be attributable to timber sales.

Total employment is also affected by indirect employment and the spending of incomes earned by those individuals working in the logging and forest products industries. The total employment related to a change of 1 million board feet is estimated to be no greater than 22 jobs. On this basis, only 11 jobs spread throughout all sections of the economy would be attributable to a harvest level of 570 MBF. This amounts to less than 0.01 percent of the 10,100 people employed in the region in 1976.

In addition to employment and earnings, timber receipts are shared with county governments. From 1978 to 1982, BLM timber sale receipts within the Planning Area averaged $29,590.21 per year (TABLE 3-3). Four percent of timber sale revenues or approximately $1,183.61 per year, has been returned to the State of California since 1978. The remainder of the receipts are retained by the federal government with 20 percent going to the general fund and 76 percent to the Reclamation Fund.

Over the period of 1979-81, receipts from timber sales within the Susanville District have exceeded program implementation costs by an average $17,125.30 per year. The past three year average ratio for dollars returned/dollars invested has been 1.5:1. (BLM, Susanville District Forestry Program Cost Benefit Analysis, 1982.)

While the percentage of BLM timber volumes and related revenues does not appear to be of significance, all sales advertised have received competitive interest. In addition, public demand for negotiated timber sales has contributed to the assigned harvest goals. Volumes from even small parcels of commercial timber are included to meet the assigned harvest goals for the Susanville District.

Table 3-2

Permittee Dependency by Size/Livestock Category*

	Sheep	Part-time Small	Medium	Large	Horses
Number of Permittees	2	39	35	21	2
Average Herd Size	4,450 S	37 C	254 C	1,073 C	6 H
Average % of Annual Forage Requirements Obtained from Alturas Allotments (Dependency)	4.2	17	11	13	38
Range of Dependency (%)	0.4 - 8	1 - 46	1 - 42	0.1 - 33	33 - 42

* Part-time/Small = 0 - 99 cattle
  Medium = 100 - 499 cattle
  Large = 500 plus cattle

Sources: Alturas, Eagle Lake, and Surprise Resource Area permits; Lassen and Modoc National Forest permits; and private leases.

Note: Herd size data may not include all permits and leases outside of the Planning Area (i.e., Central Valley or Oregon permits), or animals kept on home ranches.

Dependency is the percent of a permittee's total annual forage which is supplied by BLM allotments in the Planning Area. The table shows data on dependency for the 99 permittees.

TABLE 3-3

Summary of Volume Cut and Value Received Fiscal Years 1978-82
From Timber Sale Contracts and Negotiated Sales 1/

Fiscal Year	Number of Sales	Acres	Volume MBF	Average Stumpage per MBF	Value ($)
1978	1	10	51	123.05	6,275.73
1979	1	15	30	77.71	2,331.34
1980	2	118	197	74.15	14,608.04
1981	1	92	546	28.01	15,296.00
1982	1	256	2,007	50.24	100,832.85
Total	6	491	2,831	52.26	147,951.03
Five Year Average	1	98	566	52.28	29,590.21

1/ Modifications to contracts included in volume, value and stumpage rate.

SPECIFIC RESOURCE DESCRIPTIONS

Management Area 1 - Tablelands

Range

MA 1 contains approximately 88 percent public land. Most of the 48,466 acres are contained in 2 large allotments: North Tablelands and South Tablelands. The remaining 10 allotments each average less than 1,000 acres of public land.

The Likely Table, upon which MA 1 is located is a two level basaltic plateau running between Alturas and Likely and between the South Fork Valley and the Warner Mountains. Precipitation on the lower table is from 10 - 12", and 12 - 14" on the upper table. On the lower table deeper soils occur creating a break between a mostly big sagebrush community and a low sagebrush community.

A sagebrush defoliating moth (Aroga websteri), frequent fire, and historic overgrazing have created a disturbed environment on most of the lower table providing an opening for the invasion of weedy annual grasses and forbs first noted in the area about 30 years ago. This invasion of very competitive annuals prohibited the reestablishment of big sage and perennial grasses after disturbance causing ecological range condition to remain in poor and fair condition. Medusahead and other winter annuals germinate in the fall, and grow enough during autumn and early spring to occupy the site and prevent perennial seedlings from becoming established.

The upper table with shallower and rockier soils supports low sagebrush and perennial grasses but also has a large component of annual grasses, and is in fair ecological range condition. Good ecological range condition with big sage and a good stand of perennial grasses occurs on the eastern edge of the MA where the tableland merges with the Warner Mountains.

The annual grasses present in most of MA 1 provide an important source of spring forage for over 3,000 cattle prior to the opening of Forest Service allotments in the Warner Mountains around July 1. The annual species: medusahead (Taeniatherum asperum), various bromegrasses (Bromus spp.), and forbs such as filaree (Erodium sp.) along with remnant perennial grasses can provide good forage during the existing season of use. After the first of July, the annuals dry and become less palatible, as sharp awns harden and nutritional value is sharply reduced. Smaller eastern allotments can be used with a longer season of use due to the perennial nature of the forage.

Potential for improvement in forage value is restricted by the competitive nature of the annual species. Existing knowledge and technology are not such that these species can be easily removed or reduced in order to encourage the reestablishment of native species, or even to allow the success of a seeding of other perennial grasses and forbs. A method must be found for removing or drastically reducing the competing annuals before either forage condition or ecological range condition can be improved. Possible vegetative treatment might include reseeding of perennial grass following wildfire or experimenting with successive prescribed burns followed by reseeding. The lower table, with

deeper soils and areas of fewer rocks has the most potential for treatment. The far western edge of the lower table has pockets of remnant big sage and perennials, where lack of recent disturbance has prevented the widespread invasion of annuals. In the mid 1970's, Signal Butte field was burned by wildfire. An immediate aerial seeding of crested wheatgrass was very successful. Vegetative manipulation on the edges of the existing seeding might be attempted in order to prevent the further invasion of annuals.

Three AMPs have been in existence since the early 1970's or before. North Tablelands AMP has a three pasture rest rotation grazing system where each of the three main pastures are rested one out of three years. A smaller holding field holds part of the cattle prior to the opening of the Forest allotments. In 1981, Singal Butte Allotment was added to the North Tablelands AMP as an early use (04/16 - 05/01) field. A 1980 evaluation of the AMP found that apparent range trend has improved since the present rest rotation system began.

The South Tablelands AMP contains two pastures on the lower table, each of which is rested one of two years. The third pasture, on the upper table, is used for only two to three weeks every year by two of the three permittees who eventually trail their cattle onto the Forest. The 1982 evaluation of the South Tablelands AMP found that range trend has been mostly stable to upward since the beginning of the grazing system.

The Pine Creek Mesa AMP is a smaller two pasture allotment located on the upper table that has a deferred grazing system. One pasture is used early; 04/16 - 05/15, the other pasture later, 05/16 - 06/15; two years in a row, and then the order of use is switched. Trend studies in the AMP show that there has been an increase in total perennial grass and browse biomass as a result of this grazing practice.

Fish and Wildlife

The Likely Tablelands is one of the most important and critical geographical units for wildlife in the Alturas Planning Area.

Deer winter range occurs along the eastern edge of the MA and is utilized by the Warner Mountain deer herd. Winter deer use is constrained by a natural lack of cover and browse.

The tablelands is an antelope winter area supporting approximately one-third of the antelope wintering in California. This population has increased fourfold since 1960 to a wintering population of 1,700.

Thirteen sage grouse strutting grounds (five active) occur within this area. Disturbance of strutting activities, developments such as roads on strutting grounds, and deterioration of meadow and riparian areas are potential causes for decline in this sage grouse population.

Native fisheries are present in three streams within this MA: Fitzhugh Creek, Pine Creek, and Plum Creek. All three are in stable or improving condition under present management.

Springs and meadows are major components of the MA. Many of the meadows are in good condition, probably due to the short early season grazing. Much of the riparian vegetation along Fitzhugh Creek has been severely overgrazed in the past. Within the fenced areas, the riparian habitat has shown dramatic improvement. Livestock grazing on unprotected sections degrades water quality and suppresses riparian habitat. Potential for further fisheries and riparian habitat improvement is very high.

Wetlands enhancement has occurred on the larger reservoirs such as Payne, Dannhauser, French, and Dobe Swale.

The area provides foraging and nesting lands for birds of prey such as prairie falcons, red-tailed hawks, American kestrels, great horned owls, Swainson's hawks, and golden eagles.

Bitterbrush receives heavy use from wintering populations of antelope and deer. Use of bitterbrush by cattle is suspected to be slight due to the spring season of use.

Timber and Woodland

Timber: 57 acres of commercial forest land are within the timber base. Commercial species present are ponderosa pine, Jeffrey pine, and white fir. (See Map 3 of 27, Susanville District; Final Timber Management EA, BLM 1981.)

84 acres of noncommercial (low site) forest land are in this MA. Commercial species present are ponderosa pine and Jeffrey pine. Noncommercial species are juniper and mountain mahogany.

Woodland: There are 1,297 acres of juniper woodland. The stands of juniper are in drainages and/or scattered throughout the Tablelands. This area has been designated as a prohibited area for fuelwood cutting. This designation was made to protect the thermal cover requirements of deer and antelope as well as lessen the damage to roads by vehicular traffic during wet road conditions.

Cultural Resources

Three potential National Register districts and five potential National Register sites have been identified. Plans are to develop a Cultural Resource Management Plan (CRMP) on one of these potential National Register districts.

Soil and Water

Fitzhugh Creek has been identified as a water quality problem area due to past livestock grazing activities. Water in the stream exhibits high temperatures, reduced dissolved oxygen, and siltation. Fitzhugh Creek has a very high potential for an improved fisheries. Pine Creek has water quality suitable for existing uses. Roads crossing the Likely Table that channel water have been identified as contributing to a water quality problem.

Minerals

One oil and gas lease for 680 surface and 1,760 split estate acres has been issued. No additional oil and gas lease applications have been received. No geothermal lease applications have been filed.

Management Area 2 - Rocky Prairie

Range

MA 2 contains approximately 60 percent public land. The 12 allotments are of moderate to large size. The largest two are South Graves and Rocky Prairie allotments.

The landform in MA 2 is broken into three distinct types: The Rocky Prairie tableland on the south end, the tuff (volcanic ash) hills on the north end, and the foothills of Mahogany Ridge on the western edge. Annual precipitation ranges from 10 to 16 inches. Deep, productive soils lie in small valleys between ridges and plateaus, and on western hillsides that support big sagebrush, perennial grasses and juniper. Very shallow, droughty soils occur on tuff hillsides with scattered low sage, perennials and an occasional juniper. Rocky Prairie supports low sage, perennial grasses, and few junipers.

Much of MA 2 is woodland capable of supporting grazing rather than rangeland and is not appropriately classified as to ecological range condition. The progressive increase of juniper due to suppression of wildfire and historic overuse has reduced the remnant population of perennial grasses. Some invasion of annual grasses has occurred on deeper soils exposed to disturbance.

Cattle (1,880 head) use the allotments for spring grazing. South Graves allotment has spring and summer use. Some fall trailing is authorized in Rocky Prairie, North Graves, and Mackey allotments. Spring weather and changing needs of operators have sometimes extended the authorized season of use beyond the permit off date. In all cases this flexibility was authorized through an AMP or through an annual field inspection when requested.

Potential for improvement is greatest in the small valley pockets and western hillsides with deepest soils. Here a reduction of sagebrush and juniper through burning, herbicide application or woodcutting, along with release of remnant perennials or reseeding would greatly improve forage condition. Potential for improved management exists within four or five allotments capable of new AMP implementation. Water sources to improve distribution of livestock should be developed. Methods would include: construction of pits and reservoirs, and the cutting of juniper trees above and near spring sources to increase spring flow.

There are three existing AMPs in MA 2. South Graves AMP has a four pasture grazing system which rests each of the two early pastures one out of four years, and defers use until after seedripe one out of four years; and defers grazing until after seedripe in each of two late pastures two out of four years. An overall improvement in apparent range trend index was found upon evaluation of the AMP in 1980.

North Graves AMP has an existing two pasture spring use, deferred grazing system. The first pasture is used early (04/16 - 05/15) two years, then later (05/16 - 06/30) the next two years. The second pasture alternates with the first. Flexibility allowed in the AMP often extends the season of use into July or August. Fall trailing use is also allowed. As both pastures receive grazing use each year during the active growing season neither pasture has had the chance for regular rest. This, combined with the character of the allotment (south end hilly and rocky, north end flat and productive) has caused a decline in range trend on the flats in North Graves. An amendment to the North Graves AMP that would provide periodic rest to each field, further fencing to create additional fields along topographic boundaries, and vegetative treatment where production potential exists, would greatly improve the situation. Mackey AMP has the same existing grazing system as North Graves AMP. It has had no trend analysis but utilization studies show a distribution problem. Water development, some fencing, and a change in the grazing system to provide growing season rest, should alleviate the problems.

Five other allotments in MA 2 have potential for AMP development. Bailey, Dorris, and Westside allotments could be easily combined, having the same permittee and needing no additional fencing, to create a two pasture grazing system. Spring use pressures could be averted by selection of an early deferment system allowing use in the early pasture only until the active growing season begins around May 1.

Rocky Prairie, Ryegrass Swale and Portuguese Flat allotments also may have potential for improved management through AMP development.

Fish and Wildlife

MA 2 lies entirely within deer winter range as delineated by the California Department of Fish and Game. The primary browse species, bitterbrush, is a crucial element in this habitat and is in a highly decadent state under present management. Invasion of junipers is believed to be a primary cause for lack of browse vigor due to shading and utilization of available water. At present levels of use, meadow condition is generally declining.

The MA supports approximately 20 percent (450 animals) of the Likely Tables antelope subherd during winter and a significant summer population. This population has experienced great increases since 1960 under existing management.

One site of intensive sage grouse activity occurs within the MA.

One intermittent drainage and one perennial drainage occur across a total of five miles of public lands. Access to these areas for livestock is very limited due to rugged terrain. These areas contain native fisheries and good riparian vegetation. Larger impoundments support game fisheries which are maintained by the California Department of Fish and Game.

One golden eagle nest is located west of Clark's Reservoir within timber base lands, and one other known golden eagle nest occurs west of Dead Juniper Reservoir.

Timber and Woodland

Timber: 83 acres of commercial forest land are within the timber base. Commercial species include Jeffrey pine, incense cedar, and white fir. (See Map 12 of 27, Susanville District; Final Timber Management EA, BLM 1981.)

374 acres of noncommercial (low site) forest land are in this MA. Commercial species present are Jeffrey pine and white fir. Noncommercial species are juniper and mountain mahogany.

Woodland: There are 20,585 acres of juniper woodland and 206 acres of mountain mahogany.

Cultural Resources

Two potential National Register districts and six potential National Register sites have been identified. A CRMP on one potential National Register districts is planned.

Threatened and Endangered Plants

Eriogonum prociduum, a species listed by both the Fish and Wildlife Service and the California Native Plant Society, occurs on both public and private lands in the Dorris and Westside Allotments.

Minerals

Twelve oil and gas leases for 32,040 surface and 9,000 split estate acres have been issued. One oil and gas lease application has been received for 1,200 split estate acres. No geothermal lease applications have been filed.

Management Area 3 - Devils Garden

Range

Eighty percent of this MA is public land. One large allotment (Strip) of over 8,000 acres dominates the MA. Except for Rimrock and X-L, the remaining eight allotments contain less than 800 acres each of public land.

This MA occurs along the edges of the Devil's Garden plateau, a basaltic tableland consisting of rocks, juniper and low sage. Fourteen inches of annual precipitation fall in this area. Supporting mostly a juniper woodland, ecological range condition information is not appropriate.

Remnant perennial grasses occur beneath the juniper overstory. Pockets of invasive annuals occur on the south end of the MA. The potential for vegetative treatment is restricted due to shallow soils and few favorable methods. In areas of dense juniper reduction of this overstory by woodcutting or chaining, along with seeding, would improve understory forage condition.

Most allotments are used spring through summer. Rimrock is used one month in the spring only. Except for Strip, Rimrock, and Blacks Canyon Rim, the allotments are used by adjacent landowners to hold small numbers of cattle over the season. Some grazing permits on allotments have been lost due to the subdivision of base ranch properties and surrounding private lands. Three hundred sixty (360) cattle currently use the MA.

Blacks Canyon Rim has a 2¼ mile boundary unfenced from the adjacent Forest Service allotment. Strip allotment has an 8½ mile unfenced boundary. As the adjacent Forest Service allotments are many times larger than the BLM fields, Forest Service management of these lands affects the BLM lands. Grazing seasons coincide and coordination in the management of these adjacent lands is necessary. Strip, along with the adjacent Forest Service allotment, is the allotment most suited for an AMP.

Wild Horses and Burros

The entire 8,500 acres inside the Strip allotment are accessible to wild horses and burros. Approximately 4,800 acres of Strip are used as part of their summer concentration area. The Devil's Garden Plateau Wild Horse Management Plan prepared jointly by BLM and USFS currently provides for the removal of excess animals. Target numbers have not yet been reached.

Fish and Wildlife

The MA forms the southern and eastern boundary for the Interstate deer herd wintering area. This is a migratory deer herd which summers in Oregon and winters in California. Lands occur along the periphery of this winter range but provide critical and highly utilized browse and cover. The primary browse species, bitterbrush, is in a highly decadent state under present management. Invasion of junipers is believed to be a primary cause for lack of browse vigor, due to shading and utilization of water. Land status in critical deer winter range is predominately private.

Antelope of the Likely Tables herd utilize the MA for migration between the Devil's Garden summer range and Likely Tables wintering area. This area includes summer range and kidding grounds. There is a general shift in summer range apparent in recent years from the Devil's Garden to increasing use of the Likely Tables. As previously noted, the Likely Tables herd has increased fourfold since 1960 under current management.

One inactive sage grouse strutting ground occurs on public lands.

Several active golden eagle and prairie falcon eyries exist on public and private lands. Current land use patterns pose no threats to these areas.

Three perennial creeks, which contain populations of native fish, cross approximately 1-3/4 miles of public lands. Riparian condition is generally stable as livestock access is limited. Some degradation is occurring at two springs.

Several existing wetlands, such as Essex Reservoir and Lower Cummings, have potential for waterfowl enhancement projects.

Timber and Woodland

Timber: 22 acres of commercial forest land are within the timber base. Jeffrey pine and ponderosa pine are the commercial species present. (See Map 2 of 27, Susanvile District; Final Timber Management EA, BLM 1981.)

115 acres of noncommercial (low site) forest land are in this MA. Commercial species present are Jeffrey pine and ponderosa pine. Noncommercial species are juniper, mountain mahogany, and black oak.

Woodland: There are 6,540 acres of juniper woodland.

Minerals

Two oil and gas leases for 2,760 surface and 2,720 split estate acres have been issued. Two oil and gas lease applications have been received including 5,840 surface and 740 split estate acres. No geothermal lease applications have been filed.

Management Area 4 - North Fork

Range

This MA contains only about 50 percent public land within 18 small allotments. The average acreage of each allotment is less than 500 acres, including the public land. Crowder is the largest allotment with over 2,000 acres.

The North Fork Valley and adjacent foothills of the Warner Mountains are comprised of shallow gravelly soils on flats that support low sage and perennial grasses. Rockier juniper foothills support big sage, upland brush and perennial grasses. These allotments are in good and fair ecological range condition. Annual grasses are the major cause of the lower condition class. Hagge and Hughes allotments lie in Warm Springs Valley on rocky or tuff hills. Juniper, big and low sage, perennial and annual grasses occur.

Cattle (424 head) use the allotments primarily in the spring, although some use extends into summer. Authorized flexibility in season of use allows fall use in some allotments.

The improvement potential for range forage is very slight due to shallowness of soil on the flats and tuff hills, and steep terrain and rockiness of loamy hillsides.

Russell Slough has an existing AMP. It is a two pasture spring and fall use allotment where one pasture is used in the spring two years out of four. The other pasture is rested during the spring season those two years but has fall use. The use schedule for the pastures alternate every two years. Capik allotment is adjacent to Russell Slough and could easily be added as an additional pasture to the existing AMP as the same permittee has both allotments.

Crowder allotment has the greatest potential for development of a second AMP. The spring use grazing pressures in this allotment could be mitigated by creating two pastures and resting each pasture one year out of two. Some fall use may be possible as well.

Fish and Wildlife

The public lands in this MA are all utilized as winter range by the Warner Mountain deer herd. Under current management antelope in the Likely Tables herd have quadrupled since 1960.

Several antelope kidding areas (approximately 2,500 acres) have been identified in this area, as well as an important antelope migration route for the Likely Tables herd. The antelope migration corridor is constricted by highways, private lands, and the X-L Ranch-Indian Reservation making large numbers of animals highly vulnerable, particularly during severe weather.

One inactive sage grouse strutting ground has been identified on or adjacent to public lands southeast of Goose Lake.

Numerous flowing springs in the MA (Crowder allotment) are important resources for maintaining wildlife populations. Livestock use along stringer meadows and at springs suppresses meadow vegetation in this area.

Small aspen groves within the MA exhibit no regeneration of young plants due to concentration of livestock.

An active golden eagle eyrie exists in this MA.

Lassen Creek supports a viable trout fishery and crosses three-eighths mile of public land.

Timber and Woodland

Timber: No commercial forest land base exists in MA 4.

147 acres of noncommercial (low site) forest land are in MA 4. Jeffrey pine is the only commercial species present. Noncommercial species present are juniper and mountain mahogany.

Woodland: There are 3,048 acres of juniper woodland and 98 acres of mountain mahogany.

Cultural Resources

One potential Historic National Register site (Red Hawk Mine) has been identified. Because of safety hazards associated with the site, it has been evaluated for possible mitigative measures.

Minerals

Two oil and gas leases for 680 surface and 2,360 split estate acres have been issued. Two oil and gas lease applications have been received for 760 surface and 420 split estate acres. No geothermal lease applications have been filed.

Management Area 5 - Big Valley

Range

Of the 33 allotments in this MA, only four have more than 1,000 acres of public land. The majority of land within these allotments is covered by annual grasses and low sage. Shallow stony loam soils dominate the area. Some allotments have pockets of perennial grasses where cheatgrass and medusa-head have not yet invaded. These small allotments are used primarily in the spring to take advantage of the early maturing forage in its more palatable stage.

The four allotments containing over 1,000 acres of public land, Hitchens and Chase Valley, are the largest; 2,296 acres and 2,340 acres, respectively.

The comparatively large areas of big sage and perennial grasses in Chase Valley provide some potential for vegetation conversion. Due to the proximity to dense timber, a herbicide spray instead of a prescribed burn would have less potential for irretrievable damage. Following the spray with a protection fence and several water developments would supply the four permittees a sound basis for further improvements. The development of an AMP would outline the improvements and establish a grazing system that would insure proper management.

The Hitchens allotment also has potential for improvement. It is currently unfenced from private subdivisions to the east, causing hardships on the permittee. A fence to alleviate this problem, plus the construction of a reservoir would greatly improve the manageability of the allotment.

Fish and Wildlife

The scattered public lands in MA 5 are important to support and maintain viable resident and migratory wildlife populations, providing some important habitat components in short supply on the private lands.

Three active sage grouse strutting grounds exist on public lands. Two of these occur on isolated parcels of public land. One located north of Adin is subjected to significant disturbance from adjacent private lands. The other strutting grounds (at Lookout and southeast of Bieber) are in manageable locations due to topography or extent of adjacent public lands.

Active raptor eyries exist throughout the area, with the agricultural lands in the valley providing foraging areas, and the lowland hill areas surrounding the valley serving as roosting, nesting, and hunting areas. An active bald eagle winter roost site exists on public lands in this MA. Bald eagle nests occur on or adjacent to public lands. Significant numbers of bald eagles winter on private and public lands within the MA.

Two perennial creeks (Ash Creek and Halls Creek) which cross public lands (less than one mile on public lands) contain native fish.

Numerous wetland areas occur and support high densities of wintering and nesting waterfowl.

Timber and Woodland

Timber: 488 acres of commercial forest land are within the timber base. Commercial species include Jeffrey pine, ponderosa pine, white fir, and incense cedar. (See Map 6 of 27; 9 of 27; 10 of 27, Susanville District; Final Timber Management EA, BLM 1981.)

1,205 acres of noncommerical (low site) forest land are in MA 5. Commercial species present are ponderosa pine and Jeffrey pine. Noncommercial species are juniper, mountain mahogany, and black oak.

Woodland: There are 3,599 acres of juniper woodland.

Cultural Resources

One potential National Register district has been identified. A CRMP is planned for this district.

Minerals

Fourteen oil and gas leases for 11,860 surface and 7,840 split estate acres have been issued. One oil and gas lease application has been received for 1,680 surface and 1,440 split estate acres. Four geothermal lease applications for 960 surface acres and 680 split estate acres have been received.

Management Area 6 - Widow Peak

Range

MA 6 has very limited grazing values. Only one allotment, Big Valley, covers the entire MA, and only 1,854 acres are in public ownership. Private ownership is unknown, but is approximately eight times larger. One permittee currently grazes 40 cows for two months on this allotment, but several other parties graze livestock on unfenced lands within the MA. Scattered stands of timber and large expansive brush fields make up the major portion of the vegetation, with forage provided by perennial grasses in the understory. Because of the small percentage of public land within this allotment, in addition to its farily light use by livestock, no range improvement projects have been identified.

Fish and Wildlife

The Widow Mountain area includes deer summer range and a small section of deer winter range (Day Bench herd). Current timber management practices, which maintain uneven-aged stands with no large-scale monotypic habitat conversions, are conducive to maintaining deer habitat.

The Day Bench herd is experiencing high winter fawn mortality as a result of development of private lands in a constricted migration corridor and general poor condition of browse on public lands.

Timber and Woodland

Timber: 1,854 acres of commercial forest land are in the timber base. Of this total, 1,240 acres are in plantations. Commercial species include ponderosa pine, sugar pine, white fir, incense cedar, and Douglas-fir. (See Map 6 of 27, Susanville District; Final Timber Management EA, BLM 1981.)

No noncommercial forest land is present in MA 6.

Woodland: No woodlands occur in sufficient quantities to be measured.

Minerals

One oil and gas lease for 1,160 surface acres has been issued. No additional oil and gas lease applications have been received. No geothermal lease applications have been filed.

Management Area 7 - Little Valley

Range

This MA is comprised of 12 allotments, with 73 percent of the acreage public lands. Seven of these allotments have potential for AMPs and would benefit greatly from more intensive grazing systems and practices. The terrain in this MA varies from tablelands to hillsides to mountains and is covered with annual grasses, mixed perennial grasses and brush, and woodlands. Water holes and springs are generally well distributed throughout the allotments.

Two AMPs would be formed by joining East Beaver Creek with Plantation Field and Bald Mountain with River Pasture. This would allow rest or at least deferred grazing until fall for one pasture each year. The conversion of large brush fields to stands of perennial grass would increase the carrying capacity of Plantation Field, creating a more balanced, two pasture AMP.

The higher elevation portion of Bald Mountain has a dense perennial grass and forb understory under an increasing big sage overstory. The removal or reduction of big sage, in combination with a protective fence would create an excellent spring through fall grazing system.

The Dixie Valley allotment has a great potential as an AMP with a minimal initial investment. The present boundary fences and the irregular land pattern of the allotment lend themselves to a four pasture deferred grazing system. By creating smaller pastures in this allotment, it would be feasible to conduct experiments on medusahead eradication more easily and less expensively.

Muck Valley allotment is presently divided into pastures for separate use, but an AMP has not yet been devised. A few water developments to encourage livestock to more evenly use the pastures is all that has presently been identified to create a better grazing system.

Of the remaining allotments, 13 permittees are licensed for 3,108 cows and 6 horses primarily in the spring.

Fish and Wildlife

The Day Bench portion of the MA provides wintering habitat for the Day Bench deer herd, one of several herds composing the McCloud Flat summer herd.

Portions of the Big Valley antelope herd utilize Dixie Valley and Beaver Creek as winter range. Year-round antelope populations utilize approximately 2,900 acres as kidding grounds. Though some crop depredation problems have surfaced with the Big Valley herd in some areas, the wintering areas in this MA are capable of sustaining increases in herd size without conflicts. Current management is providing adequate habitat.

There are approximately 15 miles of riparian habitat along three creeks. Under current management, riparian condition is suppressed along short segments of all three creeks.

A golden eagle nest site occurs in Muck Valley within timber base lands. Standard operating procedures provide protection for this resource.

There is extensive development potential on existing reservoirs for fisheries introductions and waterfowl development projects.

Timber and Woodland

Timber: 1,075 acres of commercial forest land are in the timber base. Commercial species include Jeffrey pine, ponderosa pine, incense cedar, and white fir. (See Map 6 of 27; 7 of 27; 8 of 27; 11 of 27, Susanville District; Final Timber Management EA, BLM 1981.)

4,264 acres of noncommercial (low site) forest land are in the MA. Jeffery pine is the only commercial species present. Juniper, mountain mahogany, and black and Oregon oak are the noncommercial species present.

Woodland: There are 21,741 acres of juniper woodland, 99 acres of mountain mahogany, and an undetermined quantity of oak woodland.

Cultural Resources

Many potential National Register sites and districts have been identified within this culturally significant MA. At least three CRMPs would be completed on National Register districts.

Soil and Water

Several meadows exist within the MA. Most are in stable condition; however, the main meadow along Sheep Creek has a deep gully which has drained the meadow. This situation is primarily a result of natural events, although headcutting on the lateral overland flow areas and in the upper meadow are a result of concentrated livestock activities. The upper meadow contains a number of springs which support rafted meadow vegetation.

The Sheep Creek drainage requires special management practices to arrest erosion damage and to restore it to full potential. Methods may include development of Best Management Practices (BMPs) or ACEC designation with specific prescriptions to restore the watershed.

The drainage represents a fairly extensive riparian system that would be lost if protective measures are not taken. The area is important to the extent that all riparian areas are important to wildlife and other species in this region; however, no unique plant or animal species are dependent on the riparian system. The drainage can best be protected and restored using standard BMPs.

Minerals

The majority of all flat rock permits are issued in MA 7. When building trades were stronger, considerable interest was expressed in collecting flat rock. Within the last couple of years interest has fallen. Approximately 8,000 acres of flat rock collecting exists in one general area, with smaller scattered areas adjacent.

Within the Planning Area, cinders are only excavated from MA 7. Three pits provide cinders for commercial use, free use, and community improvement projects. The principal users of the pits are county and State governments who use the cinders on roads during icy conditions, road construction, and maintenance of existing roads. All three pits; Babcock, Day, and Round Barn, were opened several years ago. The Babcock Pit is beginning to show signs of cinder depletion and may become unuseable in a few years, depending on the demand. Other pits in the area or adjacent (USFS, BLM and private) lands may be able to absorb the demand. If not, new locations would need to be found for cinder pit development as future demand increases.

Two oil and gas leases for 3,080 surface acres and 920 split estate acres have been issued. Two oil and gas lease applications have been received for 1,970 surface acres and 220 split estate acres. One geothermal lease application has been filed for 200 acres.

Management Area 8 - Pit River Canyon

Range

This MA includes all of one allotment and portions of four other allotments. Four of the five are currently licensed for use by livestock. The entire area is publicly owned and encompasses all of the Pit River Canyon WSA. The major vegetation components are low sage, bluegrass and annual grasses. Thirty-eight percent is currently in good or fair condition, 15 percent is in poor condition, 38 percent is a woodland type, and 9 percent has not been surveyed. Currently, two permittees are licensed to graze 766 head of cattle for two to three months.

Wilderness designation could alter this use as well as the implementation of one spring development. Extreme steep slopes in the canyon itself preclude any grazing within the WSA.

Fish and Wildlife

Mule deer from the Day Bench herd utilize all areas west of Second Butte as winter range. Browse conditioning at three locations indicated no significant problems in vigor, recruitment, or utilization.

The Big Valley antelope herd utilizes high elevation portions of the MA north of Pit River Canyon as summer range. Approximately five square miles of winter range also occur in this area. Current upward population trends for this herd indicate that current management is adequate.

MA 8 contains approximately 15 miles of stream, including Pit River and Horse Creek. Both of these streams support thriving native fisheries. Game fish include rainbow trout and largemouth bass in Horse Creek and channel catfish and largemouth bass in Pit River. Several water quality parameters such as alkalinity, pH, temperature, and phosphorous have negative effects on fisheries, but are problems originating from private lands and are not controllable by actions within the MA.

An inventory of riparian condition was conducted at seven locations along Pit River and at one location along Horse Creek. All ratings averaged in the low-fair range; however, due to natural barriers, only minimal portions of these drainages are affected by livestock or other uses.

Within Pit River Canyon, high cliff walls provide ideal habitat for nesting raptors. Golden eagles, prairie falcons, red-tailed hawks, and American kestrels nest in high densities throughout the canyon. Ospreys utilize both Horse Creek and Pit River for foraging activities, although no nest sites are known. Swainson's hawks utilize nest sites in Muck Valley.

Water is available for wildlife throughout the MA in Pit River and Horse Creek. In highland areas such as Muck Valley, water is limited to a few sources.

Timber and Woodland

Timber: No commercial forest land base exists within this MA.

Ten acres of noncommercial (low site) forest land are in the MA. Jeffrey pine is the only commercial species. Noncommercial species include juniper and mountain mahogany.

Woodland: There are 4,744 acres of juniper woodland.

Cultural Resources

The Pit River Canyon contains many National Register sites and qualifies as a National Register district. A CRMP would be completed on this area.

Wilderness

This MA contains the Pit River Canyon Wilderness Study Area (WSA) consisting of 11,575 acres of public land with no private inholdings. The area is currently managed under Interim Management Policy which allows existing uses with restrictions and allows new uses subject to nonimpairment criteria.

Topography: The predominant feature is approximately 11 miles of the Pit River and associated canyon which dissects the area from the extreme northeast corner (elevation 3,900') in an open U-shaped configuration through the center of the WSA exiting downstream through the extreme northwest corner (elevation 3,360'). The canyon averages 300 to 400 feet in depth with extremes to 750 feet. Approximately four miles of Horse Creek are included between Little Valley (elevation 4,150'), at the southernmost end of the WSA, and its confluence with the Pit River in the center of the WSA (elevation 3,530'). From ground level at Little Valley, Horse Creek reaches a canyon depth of approximately 450 feet near its mouth. Topography of both canyons are similar with rough outcroppings, talus slopes, rimrock, and escarpments. Approximately 2,400 acres are included within the canyons of Horse Creek and Pit River. The remainder of the WSA includes acreage outside the canyons. The lands north of Pit River (in Muck Valley Allotment) include approximately 5,440 acres with two buttes, lava rock fields and rimrocks. A second block of land of approximately 2,000 acres occurs east of Horse Creek and Pit River and includes low hills and intermittent drainages. At the northwest corner of the WSA, approximately 600 acres of lava rock fields occur between Little Valley Road and Pit River.

Vegetation: Canyon wall and rim vegetation consists of ponderosa and Jeffrey pine, juniper, oak, mahogany, and numerous shrubs and grasses. The riparian zone of Pit River contains Carex and other grasses, willow, and numerous other aquatic and semi-aquatic plants. The Horse Creek riparian zone is thickly vegetated with mounds supporting Carex clumps, sweet clover, willow, oak, and ash. The Muck Valley area consists predominantly of medusahead grass, big sage, low sage, oak, ceanothus, bitterbrush, and curlleaf mahogany, with scattered and occasional dense stands of juniper. Lands east of the Pit River and Horse Creek Canyons include dense oak, juniper, and numerous shrub species.

Minerals

The Pit River WSA, between Nubieber and Little Valley, is underlain by Pliocene (2 million to 5 million years old) and Pleistocene (10,000 to 1 million years old) basalt and quaternary (1.5 million years to present) alluvium. There are no known occurrences of mineral resources in this WSA. A field examiniation of part of the WSA did not reveal any potential mineral resources. Inclusion of this WSA into the wilderness system is not expected to have any adverse effects on mineral resources.

No oil, gas, or geothermal lease applications have been filed within the WSA.

Wilderness Characteristics

Naturalness

Man's imprint on the landscape is evident in two major portions of the WSA. In the Muck Valley area, numerous vehicle ways, a log structure with fences and corrals, and four stockwater reservoirs are noticeable from higher elevations. East of Pit River and Horse Creek, similar impacts occur with a network of vehicle ways and stockwater reservoirs. Some vegetative screening is available in this area to partially soften these impacts.

Solitude/Primitive Recreation

Opportunities for primitive and unconfined types of recreation are available throughout almost the entire WSA. Fishing, hunting, wildlife observation, hiking, and climbing are a few of the potential activities available. Unconfined recreation is restricted at the extreme upper and lower ends of Pit River and the upper end of Horse Creek by private lands which intersect these watercourses. Visitors (e.g., hikers) would be forced into narrow corridors of "wilderness" immediately adjacent to private lands where access may be limited or indiscriminate private development may occur. Solitude is readily available throughout the WSA with two exceptions. The eastern boundary is a Western Pacific Railroad line. The railroad is readily visible from most higher elevations in the Muck Valley area and from within the canyon itself from First Butte north. The railroad is 500 - 600 feet above the canyon floor. Solitude is substantially impaired immediately adjacent to the tracks when a train is passing. From within the canyon and throughout the rest of the WSA, train traffic would be undetectable or audible as a distant rumble. Overall, this impact does not significantly affect solitude. Little Valley Road, a paved county road, forms the western boundary along the far western end of the WSA. WSA lands adjacent to the road are annual grasslands with scattered juniper. In addition, the configuration of the WSA, constrained by

roads and private lands, excludes most of the river and canyon and includes only a narrow strip of public lands from less than one-fourth to one-half mile in width. The presence of the road effectively eliminates opportunity for solitude in this area.

Special Features

Pit River Canyon supports high density raptor nesting habitat along isolated cliff walls. Red-tailed hawks, golden eagles, prairie falcons, American kestrels, great horned owls, and barn owls are a few of the species utilizing this habitat. Upland areas provide habitat for Swainson's hawks.

Unusual scenic quality is available throughout Pit River Canyon. Most locations along the rim and many from the center of the WSA provide dramatic overlooks of the deep gorge and surrounding topography.

An abundance and diversity of native and sport fish are visible in waters throughout the canyon in small pools less than one foot deep to holes over 25 feet deep.

Archaeological sites along the canyon rims include large habitation and food processing sites, hunting blind systems, and temporary hunting and food gathering areas.

Multiple Resource Benefits

Provides additional protection to archaeological sites and raptor nesting and foraging habitats.

Natural Systems

The ecosystem and landform associated with the WSA are Sierran Forest Province (M2610) typified by vegetation of the Western Ponderosa Forest as described by Bailey and Kuchler. Only three other units of this type are identified among Forest Service, National Park Service, and BLM further study, recommended or designated wilderness areas. Three Forest Service units totalling 23,300 acres have been recommended as suitable in their planning system. A fourth area of 8,300 acres was identified in RARE II, but not recommended. This landform/ecosystem combination is represented in tableland, cinder cone, and volcanic crater topography in the aforementioned areas. Canyon topography is not represented. The vegetation in Pit River Canyon does not actually manifest itself as a Western Ponderosa Forest but as a ponderosa forest/sagebrush steppe ecotone with much open annual grassland, brushland, and juniper woodland. Pine occurs in isolated enclaves.

Opportunities Near Population Centers

The WSA is within five hours drive of two standard metropolitian statistical areas (SMSAs) per published United States Census Bureau statistics. These centers are Reno, Nevada and Sacramento, California. Numerous large and diverse wilderness opportunities exist closer to these centers in the Sierra and Coast Ranges. Addition of the WSA to the wilderness system would not appreciably increase opportunities for these population centers.

Geographic Distribution of Wilderness Areas

Five areas of designated wilderness occur within a one hundred mile radius of Pit River Canyon. They include the South Warner Wilderness (69,547 acres), Caribou Wilderness (18,825 acres), and Thousand Lakes Wilderness (16,335 acres) managed by the U.S. Forest Service and the Lassen Volcanic Wilderness (78,982 acres) and Lava Beds Wilderness (28,460 acres) managed by the National Park Service. Total designated wilderness encompasses 212,419 acres. Additional U.S. Forest Service roadless units within one hundred miles include 307,561 acres. BLM has nine WSAs still under study totaling 360,593 acres.

Manageability of the Area as Wilderness

The manageability of the WSA is primarily affected by the intrusion of private lands from the boundaries into the WSA and range management practices and structures.

Portions of the WSA would be unmanageable where private land constricts it into narrow fingers of from one-eighth to one-half mile widths over long sections. This occurs through 1-1/2 miles at the upstream end of Pit River and through 1-3/4 miles at the downstream end starting from the mouth of Bob Creek.

Private lands intercept Horse Creek at four locations between Little Valley and Pit River and at six sites on Pit River. Where these occur in the constricted areas, wilderness manageability would be compromised. Where the private holdings occur within larger portions of the WSA, manageability would be enhanced by acquisition.

The Muck Valley portion of the WSA has numerous vehicle routes and stockwater developments which are moderate impairments to naturalness and would require road closures and rehabilitation. Altering the WSA boundaries and maintaining the emphasis on range production in this area would relieve these manageability problems.

Management Area 9 - Madeline

Range

This MA is an area of large scattered tracts of public land surrounded by subdivided private land. The primary vegetation is silver sage and perennial grasses. Two permittees are licensed to graze approximately 600 cows on the three allotments from June 1 until the end of September. Poor fence conditions and private dwellings within the allotments make this a difficult area to manage. Currently, there is a land exchange proposal that, when completed, would eliminate a major portion of this MA from public ownership. For this reason, further expenditures of funds on range improvement projects is not foreseen.

Fish and Wildlife

Antelope from the Lassen herd utilize the entire MA as summer range. Sage-grassland is the primary habitat type used by this herd. A shift in land use in this area toward agricultural uses would not necessarily be detrimental to the herd unit but could create depradation problems.

Waterfowl management areas have been developed by the California Department of Fish and Game on public land. Currently, waterfowl use of these sites is restricted to wet times of the year because no water right exists to provide wetland habitat during dry seasons.

Timber and Woodland

No timber or woodland exists in MA 9.

Threatened and Endangered Plants

The plant Lomatium ravenii is listed as "rare in California, common elsewhere" by the California Native Plant Society and is listed as endangered by the State of California. Status of the plant has changed considerably in the past few years. It has been found more abundant in California, Oregon, Idaho, and Nevada. It occurs on public land just north of Termo along Highway 395 and west of Juniper Ridge. These are extensions of the Ravendale-Madeline Plains populations. The plant is abundant within these populations and other populations within the district. There is no immediate threat or endangerment to this plant and it is not noticeably grazed by livestock.

Minerals

Two oil and gas leases for 1,560 surface acres and 140 split estate acres have been issued. No additional oil and gas lease applications have been received. No geothermal lease applications have been filed.

Management Area 10 - Mountain

Range

MA 10 contains 205,000 acres of public land. Eight major allotments contain more than 10,000 acres each (Tule Lake - 48,890). Eleven contain between 1,000 and 10,000 acres each. Eight contain less than 1,000 acres of public land each. Mostly summer grazing by 8,516 cattle, 4,000 sheep, and 4 horses occurs.

The high elevation rangelands in MA 10 receive from 14 to more than 16 inches of annual precipitation. The topography is mountainous creating large acreages affected by the aspect of south or north facing slopes. Range sites are generally stony loams with mostly big sage, upland brush, and juniper overstory. Bedrock outcrops and areas of hardpan with associated shallow stony loam range sites have low sage and juniper as overstory species. Perennial grass is abundant and dominates the vegetative community in the area burned by the Nine Mile Fire in 1973. Other areas of high perennial grass composition occur where 2,4-D was applied in the mid 1960's. The areas previously burned and treated are in good and excellent ecological condition and also provide the best livestock forage in the Planning Area. Untreated areas are mostly in fair to good ecological range condition due to excessive quantities of big sagebrush and juniper--accumulated through years of wildfire suppression and historic overgrazing. Livestock forage condition is reduced by the quantities of sagebrush and juniper as perennial grasses are crowded out by encroaching brush and trees.

The potential for improved range forage condition is greater in MA 10 than in any other MA. High precipitation and productive soils have the potential to produce up to 2,600 pounds of vegetation per acre annually. As perennial grasses are mostly present in the understory in large quantities, natural reproduction of native species rather than seeding could occur following removal or reduction of competing sagebrush and juniper by burning or herbicides.

Some high elevation water holes in the MA do not hold water season long due to the lack of sealing clays in area soils used to construct levees. Other methods of providing water in these large fields can be attempted, including water collection aprons with storage troughs and horizontal wells. Additional fencing would be required to create management systems on nine additional allotments.

Three AMPs are currently implemented in MA 10. Nelson Corral AMP was initially a two pasture system. In 1974, it was fenced into a four pasture system to provide management to the area in pastures 2 and 3 burned by the Nine Mile Fire. The four pastures are each rested one of four years and use is deferred until after seedripe the year after rest. A wildfire in pasture 4 in 1981 has disrupted the system temporarily. With the excellent quantity and quality of livestock forage in this allotment, actual use has been made up to

four surface acres per AUM in recent years, with no more than moderate utilization. Apparent trend index is mostly stable; the decline between 1970 and 1974 compensated by the improvement in range condition following the wildfire. Additional acreage in pastures 1, 3 and 4 were missed by the recent wildfires. Potential for greater improvement exists if further vegetative treatment is attempted.

Tule Lake AMP was initiated in 1971 with a three pasture deferred rotation grazing schedule. Rest rotation was implemented in 1976. After evaluation of the AMP in 1980, the present grazing system was implemented. The two pastures (1 and 3) with lower average elevations alternate early use with rest every other year. Pasture 2 has use every year following seedripe, effectively giving this pasture rest every year during the active growing season. Since 1975, there has been an upward trend in range condition. Tule Lake allotment has the greatest potential and need for vegetative treatment.

Cold Springs AMP was initiated in 1969 with a three pasture deferred rotation grazing system. In 1974, a three pasture rest rotation system was implemented. With cross fencing of the lower pasture (3) in 1982, the present system was developed. In this system, one-half of pasture 3 is used as a turnout field for about three weeks. Cattle are then moved to one of the higher pastures (1 or 2) until seedripe, (a delay of up to 30 days is allowed under flexibility in the AMP, if feed is still available) then the second high pasture is used until the off date. Flexibility allows gathering into the unused portion of the lower field, if desired for a few weeks. The lower pasture 3 alternates early use yearly between north and south fields. Higher pastures 1 and 2 alternate yearly use as well. Trend was analyzed as part of the AMP evaluation in 1980. An increase in sagebrush and a decline in the size of perennial grasses caused by natural succession and recent overgrazing (200% of authorized use was made before the 1980 evaluation), caused a recognizable decline in apparent range trend. Livestock use was cut back after the evaluation but retreatment of slopes invaded by sagebrush is necessary in order to reestablish the excellent forage condition found following the 1963 herbicide spray.

North Ash Valley, South Ash Valley, McDonald Mountain, South MacDonald, Silva Flat, Dry Cow, Mitchell Hill, South Fork and Said Valley allotments all may have potential for new AMP development.

Fish and Wildlife

Deer winter, summer, and fawning habitat occur within the MA. Much of this area may be termed intermediate range as deer may utilize it to varying degrees year-long depending upon weather. General habitat conditions provide a favorable mix of browse and cover. Specific areas contain dense juniper which is crowding out desireable browse species by shading plants and utilizing available water.

Antelope from the Lassen and Likely Tables herds summer and winter primarily in the far northern and extreme southwestern regions. Much of this habitat is intermittently wooded with dense juniper. Both are experiencing upward population trends under current management.

Sage grouse utilize at least seven known sites as strutting grounds. Disturbance of strutting activities, developments such as roads on strutting grounds, sagebrush eradications and deterioration of meadow and riparian areas are potential causes for decline in this sage grouse population.

Two perennial creeks containing native fisheries cross public lands totaling 7.75 miles. Riparian vegetation is suppressed by livestock concentration along lower portions of Dry Creek. Native fisheries occur at three springs and in numerous reservoirs. Reservoirs which contain perennial water of sufficient depth and quality to potentially support viable game fisheries are numerous in this MA.

Scattered raptor nest sites for golden eagles, goshawks, and red-tailed hawks occur throughout the MA. Standard operating procedures provide guidance for protection of these species.

Meadows associated with springs and reservoirs are numerous in the MA and provide important habitat components for all species. Natural concentration of livestock at specific meadow sites has suppressed ecological condition and overall biomass.

Timber and Woodland

Timber: 1,323 acres of commercial forest land are within the timber base. Commercial species are Jeffrey pine, ponderosa pine, white fir, and incense cedar. (See Maps 5 of 27; 10 of 27; 11 of 27; 13 of 27; 14 of 27, Susanville District; Final Timber Management EA, BLM 1981.)

2,701 acres of noncommercial (low site) forest land are in this MA. Commercial species present are Jeffrey pine and ponderosa pine. Noncommercial species include juniper, mountain mahogany, and aspen.

Woodland: There are 64,319 acres of juniper woodland, 6,259 acres of mountain mahogany, and 125 acres of aspen.

Cultural Resources

Many potential National Register sites have been identified and at least one CRMP would be completed.

Minerals

This MA has the highest potential for mineral exploration within the Planning Area with activity concentrated within the Hayden Hill Mining District.

Hayden Hill Mining District lies 15 miles south of Adin and covers approximately 2,400 acres (T.37N., R.10E., Section 31; T.37N., R.9E., Section 36; T.36N., R.9E., Section 1; T.36N., R.10E., Section 6). This is one of the most important gold mining areas in northeastern California. Mining activities began in the 1880's and came to a close in the 1940's. The area has hundreds of tons of tailing piles dotting the landscape next to open pit mines and shafts, with several miles of underground drifts and tunnels.

Exploration, including drill holes, trenching, and prospecting, is the primary mineral activity presently occurring at Hayden Hill.

Mineral development companies which hold the majority of mining claims in the Hayden Hill area include Fisher Watt, Chevron, Exxon, and PCR. There are several hundred claims in the area.

Future mining activities may include a pilot heap leach facility and an open pit mining operation, if gold resources are found in sufficient quantity and quality to warrant development.

Fifteen oil and gas leases for 37,010 surface acres and 13,600 split estate acres have been issued. Two oil and gas lease applications have been received for 640 surface acres and 1,360 split estate acres. No geothermal lease applications have been filed.

Wilderness

This MA contains the Tule Mountain WSA consisting of 16,950 acres of public land which encompasses an additional 880 acres of nonpublic land in four scattered tracts. The area is currently managed under Interim Management Policy which allows existing uses with restrictions and allows new uses subject to nonimpairment criteria.

Topography — The WSA is entirely composed of peaks, slopes, and drainages associated with Tule Mountain. Elevation ranges from 4,900' to 7,098'. Five peaks occur along a north-south line ranging in height from 6,260' to 7,098'. The unit is diamond-shaped and roughly ten miles long and six miles wide.

Vegetation — At the top of Tule Mountain are 151 acres of white fir and Jeffrey pine. Generally, slopes are open with predominantly big sage. Large isolated mahogany stands occur within the open big sage while most drainages and many slopes, particularly on the east side of the mountain, support dense juniper.

Wilderness Characteristics

Naturalness

Two cherry-stemmed roads identified in the wilderness inventory penetrate the WSA, one from the west boundary and the other from the east. These roads pass within one mile of each other near the center of the unit. In addition, numerous vehicle routes, identified as ways in the inventory, lead to 17 to 24 reservoirs in the WSA. (24 reservoirs were identified during the RMP inventory.) These and the seven other inaccessible reservoirs were built and are maintained by tracked, caterpillar-type equipment. The routes traversed by this equipment from reservoir to reservoir are visible from the original construction on some and subsequent maintenance on other of these existing reservoirs. In total, approximately 20 miles of ways exist within the WSA in addition to the six miles of road recognized in the inventory. These roads and ways remain passable with virtually no continuing maintenance. Natural rehabilitation of these impacts would occur very slowly. Though when appraised individually, each of these impacts is somewhat absorbed by vegetative and topographic screening, virtually any transect of the WSA would encounter one to several significant impairments to the natural landscape.

Solitude/Primitive Recreation

The size of the WSA lends itself to achieving a feeling of solitude. Topographic and vegetative screening serve to enhance the ability of a visitor to find seclusion from other visitors to the area. Viewing outward from within the WSA, no significant outside influences are apparent. The viewshed opens toward the South Warner Mountains to the east, toward the distant towns of Likely and Madeline to the north and south, and toward the Southern Pacific Railroad, U.S. 395, and Likely Mountain to the west.

Large size, topography, and vegetation provide opportunities for primitive and unconfined recreation such as hiking, horseback travel, hunting, etc. The area does not possess any uncommon natural features diverse, or challenging terrain to provide outstanding recreation opportunities. Most sage/juniper areas in northeastern California provide the same type of opportunities.

Special Features

The WSA contains no identified special ecological or geological features.

Multiple Resource Benefits

No significant benefits.

Natural Systems

The landform and ecosystem associated with the WSA is the Intermountain Sagebrush Province (M3130) typified by vegetation of the Sagebrush steppe as described by Bailey and Kuchler. This type is represented by one existing wilderness (28,062 acres), eight administratively endorsed WSA's (341,000 acres), and 32 WSA's (1,619,823 acres). The U.S. Forest Service has not targeted this type in their planning system.

Opportunities Near Population Centers

The WSA is within a one day drive of two major population centers, Sacramento, California and Reno, Nevada. Driving time from Sacramento approaches five hours and from Reno three hours. Numerous, large, and diverse wilderness opportunities exist closer to these centers in the Sierra and coast ranges. Addition of the WSA to the wilderness system would not appreciably increase opportunities for these population centers.

Geographic Distribution

Five areas of designated wilderness occur within a one hundred mile radius of Tule Mountain. They include the South Warner Wilderness (69,547 acres), the Caribou Wilderness (18,825 acres), and Thousand Lakes Wilderness (15,335 acres) managed by the National Park Service. Total designated wilderness encompasses 212,149 acres. Twenty-four U.S. Forest Service roadless units (173,770 acres), nine BLM California WSA;s (360,593 acres) and 22 BLM Nevada WSA's have also been identified. The U.S. Fish and Wildlife Service has eight units identified as suitable for wilderness.

Manageability of the Area as Wilderness

The boundaries of the WSA are formed by roads, ways, a railroad right-of-way, and private land boundaries. Vehicle routes penetrate into the WSA from all of these boundaries and off-road access is available from the east and north boundaries throughout their length. Enforcement of vehicle restrictions and closure of all access points along these boundaries would require a significant initial expenditure in signing, road closure and rehabilitation, and frequent patrol. Generally, with current boundaries, the WSA would not be easily managed. Modification of boundaries to exclude these access areas would eliminate approximately one-third of the WSA.

Livestock grazing is the primary nonconforming use which would continue after designation. The lack of natural water sources has required the construction of many reservoirs to distribute and water livestock. Maintenance of these and any construction of new impoundments would conflict with attempts to

rehabilitate ways and limit access. Though hunting is not a nonconforming use, extensive patrol would be required to prevent vehicle traffic in the area during deer season.

The WSA contains approximately 1,740 acres of nonpublic inholdings which are not excluded by the WSA boundary. An additional 1,000 acres adjacent to the perimeter but lying within the WSA are excluded by radical boundary configurations.

Other Resource Values

Range	Three allotments are included within the WSA. The Mitchell Hill allotment includes less than 40 acres at the extreme southern end. The Warm Spring allotment includes approximately 600 acres of private land and 550 acres of public land. The remainder of the WSA is included in the Tule Lake allotment. Numerous range improvements (fences, reservoirs) are in place within the WSA.
Recreation	Very little recreational use occurs with the exception of deer hunting during the two-week season. At that time, motorhomes and four-wheel-drive vehicles explore seemingly inaccessible areas using many vehicle ways which exist on the mountain.
Cultural Resources	Cultural resource sites are very low in density within the WSA. One site, a milling area of National Register quality, occurs along the southeast boundary.
Timber	105 acres of timber base lands which include white fir and Jeffrey pine, portions of which are in "overstocked" condition for commercial purposes. An additional 46 acres of a timber site require planting to return them to producing status.
Minerals	Mineral potential is low. Basalt found at the top of Tule Mountain could be used as a decorative stone called flat rock or lava moss rock. Access to the site is poor, and flat rock is available from other locations. The geothermal resources in the area could be used for direct heat, but there are no known geothermal resources hot enough for power generation here.
Wildlife	Mule deer are the only significant wildlife resource utilizing the WSA. Generally, poor habitat conditions with decadent browse, big sage, and dense young juniper limit diversity and utilization by many wildlife species.

Threatened and Endangered Plants

Three separate areas of sensitive plants occur in this MA. Termo/Lane allotment and Coffin allotment both contain a small population of Lomatium ravenii which is listed as endangered by the State of California.

A small population of Antennaria flagellaris, covering about 20 acres, occurs just south of the Hayden Hill townsite. This plant presently has no protection status, but is proposed for listing as threatened or endangered by the State of California and should be protected in the interim.

Ash Valley is the area of greatest concern and interest in the planning area. Three plants, Astragalus tegetarioides, Eriogonum prociduum, and Ivesia paniculata, occur and require consideration and management under BLM policy on sensitive plants. Two other California Native Plant Society listed plants, Dimeresia howellii and Draba douglasii, also occur in the Ash Valley area.

Management Area 11 - East Warners

This MA is managed by the Surprise Resource Area. The decisions for this MA would be incorporated into the Cowhead/Massacre Management Framework Plan.

Range

MA 11 is an area of 14 scattered allotments in the Surprise Resource Area, totaling 5,480 acres of public land. Nine allotments are actively licensed for use by 257 cows and 12 horses to 8 permittees primarily in the spring. The gentler slopes are covered with sagebrush and grasses, while the steeper slopes have little vegetation. Due to the size, ownership pattern and vegetative composition of these allotments, they are all custodially managed.

Fish and Wildlife

The entire MA is utilized by the Warner Mountain deer herd as winter range.

California quail, chukar, and blue grouse habitat occurs on the rocky slopes and in riparian habitats.

Two perennial creeks support cold water fisheries; however, verry little public land is contiguous to the streams.

Timber and Woodland

Timber: 222 acres of commercial forest land are within the timber base. Commercial species present are Jeffrey pine, ponderosa pine, and white fir. (See Map 1 of 27, Susanville District; Final Timber Management EA, BLM 1981.)

253 acres of noncommercial (low site) forest land are in MA 11. Jeffrey pine is the only commercial species. Noncommercial species include juniper and mountain mahogany.

Woodland: No woodland occurs in sufficient quantities to be measured.

Threatened and Endangered Plants

Galium glabrescens ssp. modocense, listed as sensitive, occurs at four known locations on public land within the Milk Creek, Granger, and Cedar Creek allotments.

Eriogonum prociduum, listed as sensitive, occurs west of Cedarville. The area is presently not in a grazing allotment.

Minerals

One noncompetitive geothermal lease covers 520 acres of public lands. One competitive lease covers 440 acres of public lands. This competitive lease is within the Lake City/Surprise Valley KGRA and the noncompetitive lease is adjacent to the KGRA. No split estate lands are involved.

Twelve oil and gas leases for 13,990 surface acres and 800 split estate acres have been issued. No additional oil and gas lease applications have been received. One noncompetitive geothermal lease for 520 surface acres has been filed.

Chapter 4

Environmental Consequences

Chapter 4

ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

This chapter provides the scientific and analytic basis for the selection of the Preferred Alternative. It discusses the significant impacts that are anticipated to result from implementation of the Preferred Alternative and each of the other alternatives. Both the beneficial and adverse impacts affecting the environmental components, as discussed in Chapter 3, will be documented. This chapter also includes: mitigating measures (not included under Standard Operating Procedures of Chapter 2) needed to enhance beneficial impacts or lessen adverse impacts; unavoidable adverse impacts which cannot be mitigated; the relationship between short-term use and enhancement of long-term productivity; and irreversible impacts and irretrievable commitment of resources.

Knowledge of the area and professional judgment, based on observation and analysis of similar conditions and responses in similar areas, have been used to infer environmental impacts where data is limited.

The analysis of alternatives is organized by issue for each MA and is based on the following assumptions:

- Near-normal annual precipitation.
- Five year implementation (1984 through 1988).
- Funds and personnel available for implementation.
- Impacts will be monitored and implementation adjusted as necessary.
- Minor adjustments in management may occur.
- Short-term refers to five years, long-term refers to twenty years.
- Water will be available at reasonable depths, and water rights will be granted by the State Water Resources Control Board.
- Baseline data accurate.
- Allotment management plans (AMPs) written during 1983-87. Environmental assessments completed before starting any project.
- Additional forage allocations for livestock made only if additional forage is permanently available.
- Lands designated for potential disposal may be privately developed and not necessarily used for livestock grazing.
- Impacts based on a 10-year management scheme.

Alternative I - Maximized Production

MANAGEMENT AREA 1:

RANGE

Medusahead has displaced perennial species over most of MA 1. Burning and seeding of 2,000 acres on an experimental basis would cause (best case) slight improvement of forage quality on five percent of acreage. One additional water development would improve livestock distribution, reducing livestock concentration on one percent of acreage. No overall change in forage species composition or production. No change in ecological range condition would occur.

Disposal of Highway allotment and Cutoff allotment would remove 39 AUMs from BLM authorization.

FISH AND WILDLIFE

Wildlife habitats would show declines in ecological condition as incremental increases in livestock grazing levels are applied. Though sufficient grass forage would be available to support the increase, competition for browse plants and concentration of additional livestock in meadow and riparian areas would cause degradation of these unprotected wildlife resources.

Antelope populations would continue to increase but on a slowing trend. Reduced cover on antelope kidding grounds would cause the animals to relocate this activity or generally lower the recruitment rate into the population as a result of increased predation and poorer habitat quality.

Deer winter range conditions would decline as incremental increases in livestock grazing levels, reducing residual browse and cover after the grazing season. This would magnify an already limiting factor in the habitat in this MA, resulting in a shift in winter range use away from public lands during relatively snow-free winters and a decline in herd condition during heavy snow years when the animals are forced into lowest portions of the winter range.

Longer seasons of heavier concentrations on wetland meadow, and riparian habitats and the reduced residual vegetation after this use would affect all species. Nongame and small game which are highly dependent upon an adequate cover component would be present at lower densities. These effects would be felt throughout the food chain as the prey base for raptors and other predators decreases, with potential negative effects on Swainsons' hawks and golden eagles.

Disposal of 720 acres of public lands in antelope summer range would have no significant impact to antelope habitat. The parcels are all adjacent to U.S. 395 and have limited habitat value. The action would have no effect on the population.

TIMBER

Same as present management, except the 7 acres reinstated to the base would produce sixteen percent additional volume within the 7 acres, attributed to intensive management practices.

WATERSHED

As a result of minimal effort in Fitzhugh Creek, physical channel structures would not be maintained and water quality would not improve beyond its present condition.

Roadways on the Tablelands would exhibit the same conditions as present management.

CULTURAL

Increased livestock use and certain vegetation treatments would significantly degrade cultural values, particularly around spring sources.

Continued OHV use would slightly degrade cultural resource values.

MANAGEMENT AREA 2:

RANGE

Implementation of new AMPs and revision of North Graves and Mackey AMPs would add to the existing South Graves AMP bringing 94 percent of public land acreage under management to meet rangeland and other multiple use objectives through fencing to create pastures (2 miles), initiation of grazing systems, 7 water developments, burning for release (4,000 acres), and burning and seeding (2,500 acres). The implementation of AMPs would provide additional livestock forage and waters to reduce the concentration pressures of livestock on loamy flats by improved distribution and an increase in available forage. Perennial forage would increase in vigor and production with grazing systems. Seedings and natural reseeding of native species would increase the quantity of good livestock forage in areas where competition by sagebrush, cheatgrass and juniper has been reduced or eliminated through burning on treated sites causing improvement in ecological range condition as well as livestock forage condition. Range user flexibility would be improved with implementation of AMPs and lengthened season of use.

FISH AND WILDLIFE

Wildlife habitats would show declines in ecological condition as incremental increases in livestock grazing levels are applied. Though sufficient grass forage would be available to support the increase, competition for browse plants and concentration of additional livestock in meadow areas would cause degradation of these unprotected wildlife resources.

Antelope populations would continue to increase but on a slowing trend. Reduced cover on antelope kidding grounds would cause the animals to relocate this activity or generally lower the recruitment rate into the population as a result of increased predation and poorer habitat quality.

Deer winter range conditions would decline as incremental increases in livestock grazing levels reduce residual browse and cover after the grazing season. Browse in this MA is generally declining in condition due to high juniper density. Increased competition for browse would further reduce browse availability for deer. A reduction in available browse would result in a direct impact in winter herd condition.

Potentially longer seasons or heavier livestock concentrations on wetland and meadow habitats, and the reduced residual vegetation after this use, would affect all species. Nongame and small game are highly dependent upon adequate residual vegetation in these habitats and would be most affected. These effects would be felt throughout the food chain as the prey base for raptors and other predators decreases, with potential negative effects on Swainson's hawks and golden eagles.

Riparian habitats would receive negligible impacts due to their inaccessibility to livestock in MA 2.

Juniper removal by directed fuelwood harvest in Bailey/Dorris allotment would have beneficial effects on deer and small game and no significant impact to nongame species. Removal of juniper would release new browse and promote resprouting of decadent plants. Soil moisture would become available and shading reduced to promote growth of grasses and shrubs. Deer use would be expected to increase in these areas. Slash piles from fuelwood cutting provide cover for small game and protect germinating grasses from livestock.

Burning of up to 4,000 acres with reseeding of up to 2,500 acres in deer winter range would remove portions of an already highly decadent browse resource. Depending upon the success rate for reestablishing vigorous new plants, some losses of deer browse would occur and be replaced by grass forage. Loss of juniper cover would have no negative effect on this winter range as cover is not a limiting factor in the habitat.

Development of 3 AMPs with grazing systems providing rest would have a positive impact on wildlife habitats within these allotments.

Of the 360 acres identified for disposal, approximately 280 acres are located adjacent to existing rural subdivisions. Though technically within identified deer winter range and antelope summer range, use of these parcels by big game is already limited. Disposal would not affect population numbers or reduce the effective size of the winter range. The remaining 200 acres are adjacent to agricultural development. One hundred twenty acres are within deer winter range and 80 acres are outside this range. Effect to deer population or distribution is negligible.

FUELWOOD

Moderate decrease in future yield of fuelwood within the MA, but within treatment areas there would be a significant decrease in future yield.

TIMBER

Same as present management.

CULTURAL

Increased livestock use and certain vegetation treatments would significantly impact cultural resources, particularly around springs and meadows.

Disposal of isolated tracts would affect cultural resources by loss of federal protection.

THREATENED AND ENDANGERED PLANTS

Increased livestock use would slightly disturb Eriogonum prociduum by trampling and soil compaction.

Increased human and vehicle activity during fuelwood cutting would slightly disturb Eriogonum prociduum.

MANAGEMENT AREA 3:

RANGE

Implementation of a coordinated Allotment Management Plan with Strip and adjacent Emigrant Springs (Forest Service) allotment, after the removal of excess wild horses (see Alternative IV), would provide a management scheme to enable better use of the entire joint allotment, reducing the concentration of livestock on the south end. Where annuals have invaded on the southern end of Strip Allotment, water development and AMP implementation would improve the vigor of existing perennial forage grasses, but cause no significant change on forage species composition or production. Clearing juniper from and reseeding 150 acres in Rimrock allotment would provide increased livestock forage on the most productive area. Woodcutting in adjacent areas would continue to release understory forage and fallen slash would protect perennial grasses and seedlings to allow vigor and growth over several years while slash decomposes. Development of three livestock water sources in Strip and Rimrock would improve livestock distribution and reduce the concentration of livestock around existing water developments. Disposal of Fisher, Kelley and Bacon allotments would remove 77 AUMs from BLM authorization.

FISH AND WILDLIFE

Wildlife habitats would show decline in ecological condition as incremental increases in livestock grazing levels and longer seasons of use are applied. Though sufficient grass forage would be available to support the increase, competition for browse plants would reduce available browse and concentration of additional livestock in meadow and riparian areas would cause degradation of these unprotected wildlife resources. Shifts in patterns of deer use would be expected with negligible impact to the population.

Antelope populations for the Likely Tables herd would receive only minor or negligible impacts from management actions within this MA. The herd uses the area primarily during migration and to a minor extent for summer range and kidding grounds.

Development of an AMP with a grazing system providing rest would have a positive effect on wildlife habitats within these allotments.

All lands within the MA are within antelope summer range and important deer winter range. Of the 3,080 acres identified for disposal, impacts to deer winter range would occur on approximately 1,600 acres, if private development occurred on these parcels. Deer use would shift away from these parcels resulting in a distribution shift rather than a population decline. Big game use of approximately 1,000 acres adjacent to major highways or within rural subdivisions is significantly reduced by these developments. Disposal of these parcels would have no effect on big game populations.

FUELWOOD

Slight decrease in future yield of fuelwood within the MA, but within treatment areas there would be a significant decrease in future yield.

Disposal of public lands would significantly decrease availability of fuelwood from public land within the MA; however, within the Planning Area there would be an insignificant decrease.

CULTURAL

Same as present management, except: (1) Land disposal and subsequent development within the Stull allotment would significantly affect cultural resources; (2) Increased livestock use would slightly degrade cultural values; (3) Livestock use around springs would significantly degrade cultural values.

MANAGEMENT AREA 4:

RANGE

Implementation of Crowder AMP and the addition of Capik allotment to Russell Slough AMP will bring 48 percent of public land acreage in MA 4 under management to meet rangeland and other multiple use objectives through fencing to create two pastures in Crowder allotment (2.5 miles), initiation of a grazing system in Crowder and implementation of a revised grazing system by including Capik in Russell Slough, development of three reservoirs in Crowder and one well in Russell Slough. Water development and fencing would improve livestock distribution to make better use of underutilized areas and reduce livestock concentration in other areas. Perennial grasses would maintain vigor and production with grazing systems providing rest during the growing season. Ecological range trend would remain stable in good and fair range condition. Range sites in fair ecological range condition and fully occupied by annual grasses and Sandburg's bluegrass would prevent revegetation by other perennial grasses. Range user flexibility would be improved with implementation of AMPs and lengthened season of use.

Woodcutting and juniper thinning would release understory forage. Fallen slash would protect perennial grasses and seedlings to allow vigor and growth over several years while slash decomposes.

With land disposal, 40 percent of the acreage of MA 4 would be lost from BLM jurisdiction. Two hundred thirty-one (231) AUMs would be removed from BLM authorization.

FISH AND WILDLIFE

Wildlife habitats would show decline in ecological condition as incremental increases in livestock grazing levels and longer seasons of use are applied. Though sufficient grass forage would be available to support the increase, competition for browse plants would reduce available browse and concentration of additional livestock in meadow and riparian areas would cause degradation of these unprotected wildlife resources. Shifts in patterns of deer use would be expected with negligible effect to the population.

Antelope utilize the MA as summer range and for kidding grounds. Public lands are very scattered and most antelope habitat is on private lands. Of approximately 6,200 acres of antelope kidding grounds within the MA boundaries, only 960 acres are on public lands.

Increases in livestock grazing levels would have no significant effect on general habitat conditions or populations.

Riparian and meadow habitats would experience significant declines in ecological condition and residual cover after the grazing season due to greater numbers of livestock concentrating in these sites. Slight declines in small game and nongame populations would occur resulting in a lower prey base for raptors and other predators.

Development of one AMP with a grazing system including rest would have a positive effect on all wildlife habitats within that allotment.

Disposal of 3,680 acres of public land includes disposal of approximately 680 acres of critical deer winter range in isolated 40 to 160 acre parcels. Disposal of these 10 parcels scattered over a distance of 15 miles would have no significant effect to deer winter range in the area. The ranch/agricultural nature of the surrounding private lands provides adequate spacing of developed parcels to meet the habitat requirements of deer in the area. Parcels north of Alturas and east of U.S. 395 are antelope summer range and kidding grounds. Of the 360 acres of kidding ground on public land, 80 acres would be disposed of in this alternative resulting in no significant effect on kidding grounds. Parcels totaling approximately 960 acres in the X-L Allotment are in an important antelope migration route between the Devil's Garden and Likely Tables. Disposal and ensuing development of these parcels would further constrict this corridor and during severe weather could potentially cause heavy antelope losses. Disposal would have severe effects in this area.

FUELWOOD

Disposal of public lands would significantly decrease availability of fuelwood from public land within the MA, however, within the Planning Area there would be an insignificant decrease.

MANAGEMENT AREA 5:

RANGE

Medusahead has invaded most of this MA. Methods for eradication or reduction of medusahead are planned in other areas. These areas would not change significantly without removing medusahead or cheatgrass and replacing them with favorable forage species. Reducing big sage on approximately 1,000 acres in Chase Valley with 2,4-D would reduce competition for moisture. This treatment and improved management would greatly improve vigor and increase the likelihood of perennial grass seedling establishment.

Fence construction would be required to provide protection to the treated area. Reservoir and spring development would greatly improve livestock distribution and decrease concentrations elsewhere.

Allowing extensions of up to 30 days in season of use would provide permittees flexibility in their operations.

Loss of Clark, Haury, Hitchens, Hines, Harper Hill, Reclamation, Round Valley, Piper, and parts of Roberts Reservoir, Barrows and Eicholz allotments would remove 572 AUMs from BLM authorization.

FISH AND WILDLIFE

Restoration of up to 210 AUMs would have minor negative effect on shrub and grassland habitats. Most of the increase would be made available through vegetative treatments; however, increased numbers of livestock would cause minor reductions in cover on areas such as antelope kidding grounds and sage grouse nesting habitat. Meadow and riparian habitats would be minimally affected by minor increases in livestock concentrating in these areas. Overall effect on all habitats is only slightly negative.

Up to 30 day extension in livestock season of use in Chase Valley and Dibble Hill allotments would significantly increase competition for browse and reduce supply in deer winter range. A shift in deer distribution would be expected as deer search for available browse.

Development of one AMP with a grazing system including rest would have a positive effect on wildlife habitats within that allotment.

Disposal acreage totaling 3,040 acres is all within deer winter range and antelope summer range. The parcels include 1,480 acres within a 61,000 acre block of critical deer winter range of mixed USFS, BLM, and private ownership. Parcels including 520 acres are within 17,000 acres of antelope kidding grounds of mixed ownership within the MA. A 160 acre parcel in Round Valley includes an active sage grouse strutting ground, which lies partially on adjacent private lands. The disposal would affect approximately two percent of this block of critical deer winter range and three percent of antelope kidding grounds within the MA. The overall effect on deer and antelope populations would be slightly negative on parcels which actually sell and where development displacing animals occurs.

FUELWOOD

No significant impacts.

TIMBER

Same as present management.

CULTURAL

Increased livestock use and certain vegetation treatments would significantly degrade cultural values, particularly around Service, Wildjack and Richmond Springs.

Land disposal would significantly affect protection of cultural resource values.

Continued OHV would slightly degrade cultural resources values.

MANAGEMENT AREA 6:

RANGE

Same as present management.

FISH AND WILDLIFE

Application of intensive timber management with specific stipulations for protection of forest-dwelling raptors would have no significant adverse effects on wildlife habitats or populations. Timber management for maintenance of an uneven-aged stand would provide a mosaic of habitat beneficial to big game.

Meadow habitat and water quality will improve at Bear Spring and improve nongame habitat within the fenced area.

TIMBER

Same as present management.

MANAGEMENT AREA 7:

RANGE

Medusahead has invaded the majority of Dixie Valley. Experimentation for the eradication or reduction of medusahead would provide information for future management. In areas of dense medusahead, cheatgrass, sagebrush or juniper, where no vegetation treatments are scheduled, no significant change would occur. In areas where cheatgrass, sagebrush and juniper would be removed or reduced by fire, great improvements in perennial grass vigor and reproduction would occur. In areas proposed for burning where perennial grasses are insufficient to reestablish themselves, seeding with favorable grass species would greatly increase available forage. Improved management through development of AMPs is critical for improvement of rangelands.

Eight miles of fence are necessary to provide protection of treated rangelands as well as create smaller, more manageable pastures where future improvements would occur.

Reservoir development would greatly improve distribution patterns and decrease pressure on forage around existing reservoirs.

Allowing 30-60 day extensions of season of use in selected allotments would provide the permittees with more flexibility.

Disposal of 80 acres in West Beaver Creek would remove 6 AUMs from BLM authorization.

FISH AND WILDLIFE

Increases in livestock grazing levels would follow burn and release projects in Bald Mountain allotment and burn and seed in Beaver Creek. In these habitats where resprouting mahogany species, serotinous browse species such as ceanothus, and high elevation sagebrush quickly reestablish young plants in burned areas, the overall effect is very positive to big game habitat. Increases in stocking rates to utilize the released grass understory can be supported with no adverse impacts to big game.

Antelope summer range would not be significantly effected by increases in livestock following burning. No antelope kidding areas would be affected.

Increased seasons of livestock grazing into summer and fall periods would intensify competition for available browse between deer and livestock. Residual browse remaining after the grazing season would decrease. Shifts in deer distribution on winter range would occur as animals search for available browse or in severe winters general herd condition would decline.

Harvest of mahogany and oak upon demand would decrease mast crop and available browse. Deer distribution on winter range would shift as deer search for food or in severe winters general herd condition would decline, depending upon the extent of fuelwood harvest.

Full use of existing material sites would have no impact on wildlife habitats or populations. Opening of new pits that may be identified would result in localized, site-specific impacts to wildlife resources at the site. Pits within the Planning Area are typically small (10 acres or less) and result in total elimination of wildlife habitats over small areas.

Meadow and riparian habitats would continue to decline due to livestock concentrations in these areas.

Development of 6 AMPs with grazing systems providing rest would have a positive effect on wildlife habitats within those allotments.

FUELWOOD

No significant impacts.

TIMBER

Same as present management.

WATERSHED

Increased livestock grazing would significantly decrease the value of meadow areas through increased soil compaction and lowering of the water table as a result of increased gullying.

CULTURAL

Increased livestock use and certain vegetation treatments would significantly degrade cultural values, particularly around spring systems and riparian areas.

Continued OHV use would slightly degrade cultural values.

MINERALS

No significant impacts.

MANAGEMENT AREA 8:

RANGE

Combination of River Pasture with Bald Mountain (MA 7) to form AMP, along with reservoir developments, would more evenly distribute livestock, improving vigor and increasing basal areas of perennial grasses.

Licensing Round Barn allotment and allowing 30 day extensions in season of use on selected allotments would improve flexibility for livestock operators.

FISH AND WILDLIFE

Increase in livestock grazing levels would follow development of grazing systems including rest or additional water to improve distribution. The minor increase would have no significant effect on wildlife habitats in general.

Increased season of use by up to 30 days would increase competition for available browse between deer and livestock. Shifts in deer distribution on winter range would occur as animals search for available browse.

Development of one AMP with a grazing system providing rest would have a positive effect on wildlife habitats within that allotment.

Burning of up to 1,900 acres for range improvement would have a positive effect on wildlife species. The target species (medusahead) has no appreciable wildlife value. Application of mitigation measures would locate treatment areas away from important wildlife resources and provide for perennial forbs, grasses, and browse in proposed seedings (see mitigation measures).

Harvest of juniper, oak and mahogany upon demand would result in reduction in oak mast supply and would force wintering deer to rely on browse. This shift would cause decline in winter deer herd condition.

FUELWOOD

The harvesting of oak would increase the total amount of fuelwood for public use within the MA.

Vegetation treatments would significantly decrease future yield of fuelwood within treatment areas.

WILDERNESS

Wilderness values within the entire 11,575 acre WSA would not be protected under the Wilderness Act.

Vegetative treatments, vehicular traffic, and fuelwood harvest would moderately degrade wilderness values (naturalness and opportunities for solitude) within the 8,530 acres outside the Pit River Canyon. Wilderness values within the 3,200 acre canyon would remain essentially intact.

WILDERNESS MANAGEABILITY

No significant impacts.

RECREATION

No significant impacts.

CULTURAL

Increased livestock use and certain vegetation treatments would significantly degrade cultural values, particularly around Mud Spring.

MINERALS

No significant impacts.

MANAGEMENT AREA 9:

RANGE

Discontinuation of license livestock grazing on 8,000 acres would remove 681 AUMs of forage from BLM authorization.

Continued authorization of 160 AUMs in Lower Highway allotment for use by livestock would not significantly alter vegetation production.

FISH AND WILDLIFE

Authorization of 160 AUMs would have no significant effect on wildlife habitats or populations within the MA.

Disposal of 8,000 acres of public lands through exchange would allow the conversion of native range to agricultural uses. Small game and nongame populations and their beneficial effect on the food chain would be altered. Antelope would continue to utilize the summer range, but would feed heavily on alfalfa fields. Antelope depredation could become heavy. Overall effects of the conversion for antelope is insignificant to the population, but would change distribution and feeding habits in the area. Flood irrigation systems would provide significant increases in waterfowl habitat.

THREATENED AND ENDANGERED PLANTS

Exchange acreage includes a portion of a sensitive plant population of Lomatium ravenii. Exchange of the parcel would not further affect this population adjacent to U.S. 395.

MANAGEMENT AREA 10:

RANGE

Continued implementation of three existing AMPs and development of seven or more additional AMPs would provide management to 87 percent of MA 10, to meet rangeland and other multiple use objectives. Fifteen miles of fence would create additional pastures enabling management to provide periodic growing season rest to pastures. Fences and additional water developments would improve overall distribution of livestock and reduce livestock use of concentration areas. Forty-two thousand (42,000) acres of prescribed burns in areas of dense or encroaching big sagebrush and juniper would significantly reduce competition to released understory forage plants, significantly increasing forage productivity. Grazing systems, water development, fencing of pastures and prescribed burning together would provide significant quantities of available forage beyond present authorized use levels. Ecological range condition in AMPs would improve where excess juniper and big sagebrush are removed; and on native range adjacent to treated areas as use shifts to areas of greater forage production. Other allotments without potential or need for AMP development would remain static in both forage and ecological range condition in the short term. In the long term, existing juniper and sagebrush plants would continue to grow eventually crowding out understory grasses. AMP development would increase flexibility in user operations.

Land disposal would remove 230 AUMs from BLM authorization. Acquisition of additional lands in MA 10 within large allotments, due to land exchange discussed in MA 9, would increase acreage, water sources and forage available for allocation to livestock under BLM authorization.

Hard rock mineral exploration and development would cause livestock to leave the immediate area during human activity. This would cause slight shift in livestock use area, but no significant problems in the short term.

Woodcutting would release understory forage. Fallen slash would protect perennial grasses and seedlings to allow vigor and growth over several years while slash decomposes.

FISH AND WILDLIFE

Burning of up to 42,000 acres within the MA to remove big sage would affect sage grouse nesting habitat in Tule Lake and Cold Springs allotments. Decline in sage grouse populations would occur as big sage cover is reduced.

Small amounts of existing browse (bitterbrush and mahogany) would be lost in large burn areas. Shifts in deer winter range use away from these areas increasing competition in remaining browse. Spring forage in the form of grasses and forbs would increase significantly in burned areas.

Increases in livestock grazing levels in response to forage increases from burning projects would concentrate livestock in burned areas and not significantly affect untreated portions of allotments. Concentration of livestock would still occur in meadow and riparian habitats causing further decline of these sites. Small game and nongame populations would decline as cover is reduced.

Antelope summer range occurs on allotments west of U.S. 395. Actions in these allotments are not expected to affect antelope populations. Grasses and forbs would increase in burned areas.

Development of six AMPs with grazing systems providing rest would have a positive affect on wildlife habitats within these allotments.

Acquisition of lands from exchange in MA 9 would block up public lands within important deer winter range providing protection to that resource.

Harvest of mahogany for fuelwood upon demand would cause minor reductions in available browse and cover. Generally, larger trees have little food value, but provide cover. Minor shifts of deer into better cover areas would occur. Overall herd condition would not be affected.

Potential mining operations at Hayden Hill would eliminate virtually all wildlife from the mining site. Some water quality deterioration on Silva Flat would occur through runoff from tailings and disturbed soils.

Disposal of up to 5,560 acres of public lands adjacent to large blocks of private land would have only minor negative effect on deer range. The primary wildlife impacts would be the disposal of key antelope migration corridors at Dry Valley Gap and Long Flat. Should private development block these areas, antelope mortality during severe winters would increase.

Longer season of use in Nelson Corral would significantly increase competition on a heavily used browse source in deer winter range.

FUELWOOD

Moderate decrease in future yield of fuelwood within MA, but within treatment areas there would be a significant decrease in future yield.

TIMBER

Same as present management.

WILDERNESS

Wilderness values within the 16,950 acre WSA would not be protected under the Wilderness Act.

Vegetative treatments would cause slight short-term degradation of wilderness values (naturalness).

Continued vehicular traffic and fuelwood harvest would cause moderate degradation of wilderness values (naturalness, solitude) as new vehicle routes are created and established ones enlarged.

WILDERNESS MANAGEABILITY

No significant impacts.

RECREATION

No significant impacts.

CULTURAL

Increased livestock use and certain vegetation treatments would significantly degrade cultural values, particularly around springs.

Continued OHV would slightly degrade cultural resource values.

MINERALS

No significant impacts.

THREATENED AND ENDANGERED PLANTS

Increased livestock use would slightly disturb sensitive plant species by trampling and soil compaction.

Increased fuelwood harvest and human and vehicular traffic would slightly disturb sensitive plants.

MANAGEMENT AREA 11:

RANGE

Eastern Block: Implementation of one AMP would provide better management on the allotment with the most potential. A grazing system would be developed to meet rangeland and multiple use objectives. Through the management scheme more livestock forage would become available. AMP development would increase flexibility for user operation. In other allotments, the existing light utilization pattern would encourage continued vigor of perennial grasses to stabilize the forage plant base and ecological range condition.

FISH AND WILDLIFE

Disposal of 960 acres of public land would have only minor affect to wildlife habitats on parcels where development occurs.

TIMBER

Same as present management.

CULTURAL

Same as present management.

THREATENED AND ENDANGERED PLANTS

No significant impacts.

Alternative II - Balanced

MANAGEMENT AREA 1:

RANGE

Same as Alternative I.

FISH AND WILDLIFE

Increases in livestock grazing as forage becomes available would have only minor effects on wildlife habitats due to additional protection to meadow and riparian habitats provided under this alternative. Reductions in residual browse on deer winter range and reduced cover on antelope kidding grounds would have negative effects offset by replacement of acreage of medusahead range with perennial grasses and browse species. Wildlife monitoring data of browse and other key habitats would be used to help determine adequate stocking thereby preventing undue impacts to these areas.

Exclusion of livestock from an additional four miles of Fitzhugh Creek would provide management opportunities for improvement of fisheries habitat. Improving riparian vegetation would lower stream temperatures and decrease siltation. These benefits would improve all downstream areas of the creek as well as the protected sections.

Burning of up to 2,000 acres for range improvement would have a positive impact to wildlife populations. The target species (medusahead) has no appreciable wildlife value. Application of mitigation measures would locate treatment areas away from important wildlife resources and provide for suitable perennial forbs, grasses, and browse in proposed seedings (see Mitigation Measures).

Fencing of meadows and springs would provide improved water quality and yield and additional cover and habitat for small game and nongame. The action would improve sage grouse nesting and brood rearing habitat and prey base for raptors and other predators.

Deer and antelope habitats would remain static. Deer and antelope populations would not be affected. Numbers of deer utilizing habitats on public lands would remain generally stable. Antelope populations would continue to increase subject to annual harvest through the hunting season permit quotas.

Disposal of 720 acres of public lands in antelope summer range would have no significant effect on antelope habitat. (See Impacts, Alternative I.)

TIMBER

Same as present management except: Modified harvest on 18 acres to protect Pine Creek watershed would result in minimal reduction of productivity of the stand. A reduction in productivity on the 18 acres of less than five percent is expected.

WATERSHED

As a result of continued efforts in Fitzhugh Creek, water quality would become optimum. Meadow and riparian values would be maximized.

Due to special timber harvest practices along Pine Creek, no water quality degradation would occur during timber harvest.

Improved alignment and design of problem road areas on the Likely Tablelands would reduce soil loss.

CULTURAL

Increased livestock use and certain vegetation treatments would significantly degrade cultural values, particularly around spring sources.

Continued OHV use would slightly degrade cultural values. Significant reduction of degradation in National Register sites.

MANAGEMENT AREA 2:

RANGE

Same as Alternative I.

FISH AND WILDLIFE

As additional forage becomes available, the incremental increase in livestock grazing levels would reduce residual browse after the grazing season; however, juniper thinning projects designed to release additional browse would tend to offset this reduction. Slight shifts in deer feeding areas but no overall population decline would occur.

As increases in livestock grazing are applied, unprotected meadows would be affected as in Alternative I. Exclusion of livestock from 17 springs and meadows would allow full recovery of those sites and offset negative effects on meadows resulting in no significant effects on game or nongame species.

Burning of up to 6,500 acres would reduce available browse and replace it with grass forage as described in Alternative I.

Disposal of 160 acres in deer winter range would have negligible effects on deer populations or distribution as described in Alternative I.

Development of three AMPs as described under Alternative I.

FUELWOOD

Moderate decrease in future yield of fuelwood within the MA, but within treatment areas there would be a significant decrease in future yield.

TIMBER

Same as present management.

CULTURAL

Increased livestock use and certain vegetation treatments would significantly degrade cultural resources.

THREATENED AND ENDANGERED PLANTS

No significant impacts.

MANAGEMENT AREA 3:

RANGE

Same as Alternative I.

FISH AND WILDLIFE

Development of AMPs as described under Alternative I.

Wildlife habitats would show no significant declines in ecological condition. Incremental increases in livestock grazing levels would not be implemented unless wildlife monitoring data of browse and other key habitats indicate no significant impacts.

Protected meadow and riparian sites would show significant increases in cover, ecological condition, etc. providing increases in small game and nongame populations and resulting increases in prey base for raptors and other predators.

Disposal of 1,920 acres would have no significant effect on antelope habitats or populations. No antelope kidding grounds, migration corridors or other key habitats are being considered for disposal. All the parcels are within important deer winter range. The parcels selected for disposal are mostly within rural subdivisions or adjacent to major highways which significantly reduce wildlife utilization on these parcels. Disposal would have no significant effect on big game populations. One parcel contains an inactive sage grouse strutting ground. If this population has been extirpated by existing developments, disposal would have no effect.

FUELWOOD

Disposal of public lands would significantly decrease availability of fuelwood from public land within the MA, however, within the Planning Area there would be an insignificant decrease.

TIMBER

Same as present management.

CULTURAL

Same as present management, except: (1) Increased livestock use would slightly degrade cultural values; (2) Restricted OHV use around National Register sites would eliminate cultural disturbance; (3) Land disposal and subsequent development within the Stull Allotment would significantly affect cultural resources.

MANAGEMENT AREA 4:

RANGE

Same as Alternative I, except through land disposal only 25 percent of the acreage and 179 AUMs would be lost from BLM jurisdiction.

FISH AND WILDLIFE

Wildlife habitats would show no significant declines in ecological condition. Incremental increases in livestock grazing levels would not be implemented unless wildlife monitoring data of browse and other key habitats indicate no significant effects.

Protected meadow and riparian sites would show significant increases in cover, ecological condition, etc. providing increases in small game and nongame populations and resulting increases in prey base for raptors and other predators. Unprotected sites would remain static.

Disposal of 1,960 acres of public lands would affect scattered parcels of deer winter range and 80 acres of antelope kidding ground as described in Alternative I. The 960 acres in X-L Allotment would not be put up for disposal. Overall effect on wildlife habitats is not significant.

FUELWOOD

Disposal of public lands would significantly decrease availability of fuelwood from public land within the MA, however, within the Planning Area there would be an insignificant decrease.

MANAGEMENT AREA 5:

RANGE

Same as Alternative I, except loss of Clark, Haury, Hitchens, Hines, Harper Hill, Round Valley, Piper and Eicholz allotments would remove 481 AUMs from BLM authorization.

FISH AND WILDLIFE

Wildlife habitats would show no significant declines in ecological condition. Increases in livestock grazing levels would not be implemented unless wildlife monitoring data of browse and other key habitats indicate no significant effects.

Development of one AMP as described in Alternative I.

Disposal of 2,560 acres excludes 400 acres of antelope kidding grounds identified in Alternative I and 480 acres of critical deer winter range. The sage grouse strutting ground is also retained. Effects on antelope populations would be negligible. Deer populations would be slightly affected as in Alternative I. The sage grouse population would remain viable until development of the adjacent private lands affects the strutting ground.

FUELWOOD

No significant impacts.

TIMBER

Same as present management.

CULTURAL

Increased livestock use would slightly degrade unidentified cultural values; particularly sites around spring sources such as Service, Wildjack, and Richmond Springs that are unprotected.

Land disposal could significantly affect protection of cultural resource values.

MANAGEMENT AREA 6:

RANGE

Same as present management.

FISH AND WILDLIFE

Same as Alternative I.

Lands identified for disposal totaling 230 acres include no deer winter range, antelope habitat, or any other wildlife resources of significance. Two parcels totaling 120 acres are within deer summer range. Disposal would have no significant effect on wildlife populations.

TIMBER

Same as present management.

MANAGEMENT AREA 7:

RANGE

Same as Alternative I , except fencing of Upper Horse Creek, Russell Dairy Creek and Sheep Valley would not reduce AUMs by a significant amount due to vegetation treatments.

FISH AND WILDLIFE

Increases in livestock grazing levels would affect wildlife habitats as described in Alternative I. Wildlife monitoring data of browse and other key habitats would be used to help determine adequate stocking thereby preventing undue impacts to these areas.

Exclusion of livestock from 3½ miles of riparian habitat, 13 springs, and 350 acres of meadow in Sheep Valley would provide rapid restoration of riparian and improving trend in meadows. Small game and nongame populations would significantly increase. Fisheries habitat and downstream water quality would improve as would fish populations.

Development of 6 AMPs as described in Alternative I.

Prescribed burning of decadent brush on Day Bench would decrease winter fawn mortality and improve winter herd condition.

Utilization of existing and potential new material sites would affect wildlife as described in Alternative I.

Harvest of fuelwood would have no significant effect on wildlife habitats or populations.

FUELWOOD

Removal of fuelwood harvest from Beaver Creek National Register District and Sheep Valley would slightly decrease availability of fuelwood from public lands within the MA, however, within the Planning Area there would be an insignificant decrease.

TIMBER

Same as present management.

WATERSHED

Exclusion of cattle and vehicular use from 350 acres of meadow would maintain existing values and slightly improve condition of riparian vegetation and reduce trampling of springheads.

Reduction of livestock numbers and use of grazing systems in AMP allotments would slightly improve meadows outside the 350-acre exclusion.

Protection of 65 acres of riparian woodland from fuelwood harvest would maintain streambank stability and shade cover along Sheep Creek.

CULTURAL

Increased livestock use and certain vegetation treatments would significantly degrade cultural values, particularly around spring systems and riparian areas.

Slightly reduced degradation to cultural sites by restricting vehicles around National Register sites and districts.

MINERALS

Closure of 2,400 acres of flat rock in West Beaver Creek would have a significant effect on local users. The closed area constitutes approximately 25 percent of the flat rock area.

MANAGEMENT AREA 8:

RANGE

Same as Alternative I, except partial wilderness designation for 6,640 acres would cause slight adverse impacts due to contraints on reservoir development and motor vehicle travel necessary to maintain existing range improvements and distribute salt.

FISH AND WILDLIFE

Impacts from additional livestock grazing levels as described in Alternative I.

Additional protection to wildlife habitats would provide immediate positive response to protected sites.

Development of one AMP as described in Alternative I.

Designation of approximately 6,640 acres as wilderness would provide a high level of protection for wildlife values within Pit River Canyon and adjacent uplands. No significant population changes in wildlife species would occur.

Limited harvest of mahogany and oak and prohibition of all woodcutting within the wilderness area would ensure sufficient mast supply and maintain winter deer herd condition.

Acquisition of approximately 740 acres of private lands would have no significant effect on wildlife habitats.

FUELWOOD

Restricting fuelwood cutting within Pit River Canyon would slightly decrease fuelwood availability within the MA.

Vegetation treatments would significantly decrease future yield of fuelwood within treatment areas.

WILDERNESS

Same as Alternative I, except: All wilderness values would be protected within the 6,640 acre recommended wilderness area.

Remaining 4,935 acres would be moderately degraded as in Alternative I.

Acquisition of 740 acres of private land would significantly improve manageability and insure preservation of natural condition along watercourses of Pit River and Horse Creek.

WILDERNESS MANAGEABILITY

Management is enhanced because of use of natural barriers, elimination of odd boundary configuration, vehicle ways, and non-conforming uses.

RECREATION

No significant impacts.

CULTURAL

Continued livestock use and certain vegetation treatments would slightly degrade cultural values.

MINERALS

Prohibition of new claims or leases after December 31, 1983 in designated wilderness would have no effect due to low potential for mineral development.

No mining claims or oil and gas leases in the area (6,640 acres).

MANAGEMENT AREA 9:

RANGE

Same as Alternative I.

FISH AND WILDLIFE

Authorization of 160 AUMs would have no significant effect on wildlife habitats or populations within the MA.

Discontinuing livestock grazing in all or portions of three allotments would improve cover for nongame and small game resulting in higher populations of these species and improved prey base for raptors and other predators.

Disposal of 8,000 acres of public lands through exchange would allow the conversion of native range to agricultural uses. Small game and nongame populations and their beneficial effect on the food chain would be altered. Antelope would continue to utilize the summer range but would feed heavily on alfalfa fields. Antelope depredation could become heavy. Overall effects of the conversion on antelope is insignificant to the population but would change distribution and feeding habits in the area. Flood irrigation systems would provide significant increases in waterfowl habitat.

THREATENED AND ENDANGERED PLANTS

Same as Alternative I.

MANAGEMENT AREA 10:

RANGE

Same as Alternative I, except areas chosen for prescribed burning and patterns of burning would be constricted by wildlife habitat needs. Costs of burning would be increased and effectiveness of burns in meeting rangeland objectives would be reduced.

FISH AND WILDLIFE

Impacts of burning projects are discussed in Alternative I.

Livestock would be excluded from numerous meadows and one riparian zone thereby reducing the effect of increased livestock use in burned areas. Overall meadow condition would significantly improve.

Development of six AMPs as described in Alternative I.

Juniper thinning projects to rejuvinate browse would improve available browse with existing seasons of livestock grazing. Any improvement of this heavily used resource in Nelson Corral would provide direct benefits to winter deer herd condition.

Harvest of juniper and limited mahogany would have no negative effects on wildlife. Harvest from areas of decadent browse would open up the canopy and and improve available moisture for browse plants.

Disposal of 4,920 acres includes no parcels within antelope migration routes. Effects on deer range are discussed in Alternative I.

FUELWOOD

Moderate decrease in future yield of fuelwood within the MA and the Planning Area, but within treatment areas there would be a significant decrease in future yield.

TIMBER

Same as present management.

WILDERNESS

Same as Alternative I.

WILDERNESS MANAGEABILITY

No significant impacts.

RECREATION

No significant impacts.

CULTURAL

Increased livestock use and certain vegetation treatments would significantly degrade cultural values, particularly around springs.

Slightly reduced degradation to cultural values by restricting vehicles around National Register sites.

THREATENED AND ENDANGERED PLANTS

No significant impacts.

MANAGEMENT AREA 11:

RANGE

Same as Alternative I for Upper Lake allotment only. As the rest of MA 11 would be disposed of a loss of 253 AUMs from BLM authorization would result.

FISH AND WILDLIFE

Disposal of 4,720 acres of public lands would remove a significant amount of browse and cover utilized by deer wintering at low elevations along Surprise Valley. Development of these parcels would cause major shifts in winter range utilization and constrict deer into smaller areas. General decline in winter herd condition would be expected.

TIMBER

Same as present management, except modified harvest within a National Register district would result in minimal reduction of productivity of the stand. A reduction in productivity of less than five percent is expected.

CULTURAL

Continued livestock trampling would continue to slightly degrade cultural values.

No significant disturbance from OHV use.

THREATENED AND ENDANGERED PLANTS

Sensitive plant populations would be lost through potential disposal of public lands.

Alternative III - Maximized Protection

MANAGEMENT AREA 1:

RANGE

Medusahead has displaced perennial species over most of MA 1. Reduction of livestock use would cause no significant change in forage species composition or production. No change in ecological range condition would occur in 10 years.

Disposal of Highway allotment and Cutoff allotment would remove 39 AUMs from BLM authorization.

Alternative IIIa - No Grazing: Medusahead has displaced perennial species over most of MA 1. Elimination of all livestock grazing would cause no significant change in forage species composition or production. No change in ecological range condition would occur in 10 years.

FISH AND WILDLIFE

Same as Alternative II, except: (1) All wetland, meadow, and riparian habitats would improve due to lower numbers of livestock concentrating in these areas. Residual vegetation remaining after the grazing season would increase providing improved cover for small game and nongame. Improved cover around wetlands would increase waterfowl production from current levels; (2) General habitat conditions on shrub and annual grassland portions would not significantly improve due to the dense ground cover of medusahead which crowds out most other plant species of value to wildlife; (3) Disposal of 520 acres of public lands in antelope summer range would have no significant effect on antelope habitat. (See Impacts, Alternative I.)

Alternative IIIa - No Grazing: All wetland, meadow, and riparian habitats would show significant improvement due to elimination of livestock grazing. Total vegetative cover in these areas would increase providing improved habitat for small game and nongame and improved prey base for raptors and other predators. Improved cover around wetlands would increase waterfowl production from current levels.

General habitat conditions on shrub and annual grassland portions would not significantly improve due to the dense ground cover of medusahead which crowds out most other plant species of value to wildlife.

TIMBER

Same as Alternative II.

Alternative IIIa - No Grazing: Same as present management.

WATERSHED

Same as Alternative II, except that restriction of OHVs during wet soil periods would further reduce maintenance costs.

Alternative IIIa - No Grazing: Same as Alternative III, except for areawide improvement of soil and riparian areas which are not protected under Alternative III. Would not significantly change the beneficial uses of water in area over Alternative III.

CULTURAL

Decreased livestock use would moderately lessen the degradation of cultural values, particularly around spring sources.

Continued OHV use would slightly degrade cultural values. Significant reduction of degradation in National Register sites.

Alternative IIIa - No Grazing: No impacts from livestock.

MANAGEMENT AREA 2:

RANGE

Construction of seven waterholes, two miles of fence along with implementation of grazing systems under three new AMPs, and revision of two AMPs accompanied by a reduction in livestock use would cause better distribution of livestock and reduced concentration of livestock on loamy flats. Gradual but limited improvement of loamy flats would occur as perennial grasses increased in vigor and production, but only into spaces not occupied by dense stands of big sagebrush and cheatgrass. Uplands and tuff sites would continue static to upward ecological range trend. Flexibility of North Graves and Mackey AMPs would be reduced.

Alternative IIIa - No Grazing: Elimination of livestock grazing would continue static to slight upward trend in ecological range condition on upland and tuff hills. Perennial grasses on loamy flats would increase in vigor and production, but only into spaces not currently occupied by big sagebrush, juniper and cheatgrass. A gradual but limited improvement in ecological range condition on loamy flats would occur.

Elimination of livestock grazing would contribute to an increase in fine fuels available year long.

FISH AND WILDLIFE

By maintaining existing seasons and levels of livestock grazing, providing for exclusion of livestock from meadow and spring habitats, and applying vegetative treatments only for the improvement of wildlife habitats, deer, antelope, sage grouse, and nongame would experience improving habitats. Population increases and improving herd condition would be expected.

AMP development as described in Alternative I.

Alternative IIIa - No Grazing: All wetland and meadow habitats would show significant improvement due to elimination of livestock grazing. Total vegetative cover in these areas would increase providing improved habitat for small game and nongame and improved prey base for raptors and other predators. Improved cover around wetlands would increase waterfowl production from current levels.

General cover conditions on shrub and grassland portions would improve significantly providing additional quality antelope, small game, and nongame habitat.

Browse conditions in deer winter range would show only minor improvement due to the limiting effects of juniper encroachment on this resource.

FUELWOOD

No significant impacts.

Alternative IIIa - No Grazing: No significant impacts.

TIMBER

Same as present management.

Alternative IIIa - No Grazing: Same as present management.

CULTURAL

Same as present management, except slightly reduced degradation to cultural resources by reduced livestock numbers.

Alternative IIIa - No Grazing: No degradation to cultural resources from livestock.

THREATENED AND ENDANGERED PLANTS

No significant impacts.

Alternative IIIa - No Grazing: No significant impacts.

MANAGEMENT AREA 3:

RANGE

Same as present management, except disposal of Bacon allotment would remove 42 AUMs from BLM authorization.

Alternative IIIa - No Grazing: Elimination of livestock grazing would cause an increase in the vigor of perennial grasses. Where space is available these grasses would increase in production and number. Where existing space is occupied by annual grasses or by dense stands of juniper, no significant change in forage species composition or production would occur.

Elimination of livestock grazing would contribute to an increase in fine fuels available year long.

FISH AND WILDLIFE

Wildlife habitats would remain in stable condition with no overall changes in antelope, deer, small game, or nongame populations. Light livestock utilization would provide sufficient cover, forage, and browse.

Meadow and riparian habitats would improve as in Alternative II.

Development of AMPs as described under Alternative I.

Disposal of 640 acres of deer winter range previously affected by developing rural subdivision would have no effect on deer population or habitat condition.

Alternative IIIa - No Grazing: Wildlife habitats would show minor improvement due to the elimination of livestock grazing. Some minor increase in available browse would improve a habitat component which is not limiting to the deer population under current management.

Removal of livestock from all riparian and meadow habitats would significantly increase cover and ecological condition at these sites, resulting in improved conditions for small game and nongame, increasing prey base for raptors and other predators.

FUELWOOD

No significant impacts.

Alternative IIIa - No Grazing: No significant impacts.

TIMBER

Same as present management.

Alternative IIIa - No Grazing: Same as present management.

CULTURAL

OHV impacts to cultural sites would be eliminated as OHV would be restricted to existing roads.

Slight decrease in damage to cultural sites by reduced cattle numbers.

Alternative IIIa - No Grazing: No degradation to cultural values from livestock.

MANAGEMENT AREA 4:

RANGE

Existing light utilization patterns would continue throughout most of the MA and would encourage continued vigor of perennial grasses to stabilize the forage plant base in good and fair condition. Implementation of Crowder AMP with fencing, water development and a grazing system would improve livestock distribution making better use of underutilized areas and reducing livestock concentration in riparian areas. Perennial grasses would maintain vigor and production with grazing systems providing rest during the growing season. Range sites in fair ecological condition are fully occupied by annual grasses and Sandberg's bluegrass preventing revegetation by other perennial grasses. Woodcutting and juniper thinning would continue to release understory forage. Fallen slash would protect perennial grasses and seedlings to allow vigor and growth over several years while slash decomposes.

Land disposal would remove only 10 percent of the MA from BLM jurisdiction. 62 AUMs would be lost from BLM authorization.

Alternative IIIa - No Grazing: No livestock grazing would cause an increase in the vigor of perennial grasses. Where space is available, these grasses would increase in production and number. Where existing space is occupied by annual grasses, Sandberg's bluegrass or by juniper, no significant change in forage species composition or production would occur. With no grazing in riparian areas, Crowder allotment would remain in good condition. Elimination of grazing would contribute to an increase in fine fuels available year long.

FISH AND WILDLIFE

Wildlife habitats would remain in stable condition with no overall changes in antelope, deer, small game, or nongame populations. Light livestock utilization would provide sufficient cover, forage, and browse.

Meadow and riparian habitats would improve as in Alternative II for protected sites and show minor improvement at unprotected sites due to slight reductions in livestock use.

Development of one AMP as described in Alternative I.

Seven hundred twenty (720) acres of public land identified for disposal contains approximately 40 acres of deer winter range and 600 acres of antelope summer range. The dispersed nature of these parcels and the locations of some parcels adjacent to existing developed lands and U.S. 395 already limit their potential as viable range. The disposal would have minor overall effects on these wildlife resources.

Alternative IIIa - No Grazing: Wildlife habitats would show minor improvement due to the elimination of livestock grazing. Some minor increase in available browse would improve a habitat component which is not limiting to the deer population under current management.

Removal of livestock from all riparian and meadow habitats would significantly increase cover and ecological condition at these sites resulting in improved conditions for small game and nongame, increasing prey base for raptors and other predators.

FUELWOOD

Disposal of public lands would moderately decrease availability of fuelwood from public land within the MA, however, within the Planning Area there would be an insignificant decrease.

Alternative IIIa - No Grazing: No significant impacts.

MANAGEMENT AREA 5:

RANGE

Reduced levels of grazing in allotments dominated with medusahead, cheatgrass, dense sagebrush or juniper where no vegetation treatments are scheduled would result in no significant change.

Improved management by development of the Chase Valley AMP (no vegetative treatments), along with reduced livestock numbers would result in increased vigor of existing perennial grasses. No increase in perennial grass plants is foreseen.

Prescribed burning or thinning of juniper (as proposed by wildlife) would decrease competition for moisture with perennial grasses. Existing perennial grass plants in these areas would improve in vigor and basal area.

Construction of reservoirs and development of springs, along with improved management, would greatly improve distribution patterns.

Alternative IIIa - No Grazing:

Elimination of livestock grazing would cause existing perennial grass plants to improve in vigor and increase in basal area. Perennial grass seeding establishment would occur in open sites, but not in dense cheatgrass, medusahead, sagebrush or juniper sites.

FISH AND WILDLIFE

Reduction in livestock grazing levels would provide increased residual forage and reduce competition for available browse. General population increases in small game and nongame would be expected. Deer distribution patterns would be expected to shift toward areas of improved browse availability. Cover on sage grouse strutting grounds and nesting areas and on antelope kidding grounds would improve, reducing predation in these species.

Development of one AMP as described in Alternative I.

Disposal of 1,240 acres of public lands includes 520 acres of critical deer winter range or less than one percent of this block of winter range. One hundred sixty (160) acres of antelope kidding grounds included is less than 1 percent of the kidding grounds in the MA. Impacts to these resources are insignificant.

Alternative IIIa - No Grazing: Elimination of livestock from the public lands in this MA would provide significant improvement to virtually all wildlife habitats. Cover and available browse and forage would allow large short-term and moderate long-term population increases for small game and nongame species, and provide higher quality habitat for greater numbers of big game species.

FUELWOOD

No significant impacts.

Alternative IIIa - No Grazing: No significant impacts.

TIMBER

Same as present management.

Alternative IIIa - No Grazing: Same as present management.

CULTURAL

Decreased livestock use would slightly lessen the degradation to cultural values.

Alternative IIIa - No Grazing: No impacts from livestock.

MANAGEMENT AREA 6:

RANGE

Same as present management.

Alternative IIIa - No Grazing: Elimination of livestock grazing would cause existing perennial grass plants to improve in vigor and increase in basal area. Perennial grass seedling establishment would occur in open sites, but not in dense cheatgrass, medusahead, sagebrush, or juniper sites.

FISH AND WILDLIFE

Same as Alternative II.

Alternative IIIa - No Grazing: Same as Alternative II.

TIMBER

Same as present management.

Alternative IIIa - No Grazing: Same as present management.

MANAGEMENT AREA 7:

RANGE

Reduced levels of livestock, along with improved management and construction of reservoirs through AMP development (no vegetation treatments) would greatly improve vigor of perennial grasses. No perennial grass seedling establishment would occur due to existing levels of medusahead, cheatgrass, dense stands of sagebrush and juniper.

Increased vigor and reproduction of perennial grasses would occur in areas where the wildlife program would implement burns to remove brush and junipers.

Alternative IIIa - No Grazing: Elimination of grazing would cause existing perennial grass plants to improve in vigor and increase in basal area. Perennial grass seedling establishment would occur in open sites, but not in dense cheatgrass, medusahead, sagebrush or juniper sites.

FISH AND WILDLIFE

Reduction in livestock grazing levels and light utilization would improve browse availability for deer and generally improve cover density beneficial to all species, particularly small game and nongame. All wildlife populations would have opportunity to increase in number and range within the MA.

Exclusion of livestock from all of the Sheep Creek watershed would offer slight improvement over Alternative II. Browse and cover would increase slightly in upland portions of the watershed.

Development of six AMPs as described in Alternative I.

Impacts of fuelwood harvest as described in Alternative II.

Alternative IIIa - No Grazing: Elimination of livestock grazing in the MA would cause large increase in forage and cover in all habitats. Moderate increases in big game populations would result from improved browse, green forage, and cover. Small game and nongame populations would show moderate increases due to improved cover. Prey base for raptors and other predators would increase.

FUELWOOD

Removal of fuelwood harvest from Beaver Creek National Register District would slightly decrease availability within the MA, but within the Planning Area there would be an insignificant decrease.

Removal of fuelwood harvest from Sheep Valley ACEC would moderately decrease availability within both the MA and the Planning Area.

Alternative IIIa - No Grazing: No significant impacts.

TIMBER

Same as present management.

Alternative IIIa - No Grazing: Same as present management.

WATERSHED

Same as Alternative II, except for a significant increase in meadow values (vegetation and soil) outside the 350-acre exclusion.

Alternative IIIa - No Grazing: Same as Alternative II, except for areawide improvement of soil and riparian areas which are not protected under Alternative III. Would not significantly change the beneficial use of the water in area over Alternative III.

CULTURAL

Decreased livestock use would moderately decrease damage to cultural values, particularly around spring and riparian areas.

Slightly reduced degradation to cultural sites by restricting vehicles around National Register sites and districts.

Alternative IIIa - No Grazing: No impacts from livestock.

MINERALS

Closure of 2,400 acres of flat rock in West Beaver Creek would have a significant impact to local users. The closed area constitutes approximately 25 percent of the flat rock area.

MANAGEMENT AREA 8:

RANGE

Same as present management except recommendation of 11,575 acres as suitable for wilderness designation would constrain motor vehicle travel used for salting, fence maintenance and reservoir development.

Alternative IIIa - No Grazing: Elimination of livestock grazing would cause existing perennial grass plants to improve in vigor and increase in basal area. Perennial grass seedling establishment would occur, but not in dense cheatgrass, medusahead, sagebrush or juniper sites.

FISH AND WILDLIFE

Existing levels of livestock grazing would provide for stable wildlife populations for all species.

Development of one AMP as described in Alternative I.

Designation of entire 11,575 acres as wilderness would maximize protection for wildlife values throughout the entire MA. No significant population changes in wildlife species would occur.

Prohibiting all fuelwood harvest would ensure sufficient mast supply and maintain winter deer herd condition.

Alternative IIIa - No Grazing: Elimination of livestock grazing in the MA would cause moderate increase in forage and cover in all habitats. Slight increases in big game populations would result from improved browse, green forage, and cover. Small game and nongame populations would show moderate increases due to improved cover. Prey base for raptors and other predators would increase.

FUELWOOD

Prohibiting fuelwood cutting would significantly decrease fuelwood availability on public lands.

WILDERNESS

All wilderness values within entire WSA would be fully protected.

Acquisition of 1,300 acres of private land would significantly improve manageability and insure preservation of entire watercourses of Pit River and Horse Creek.

Alternative IIIa - No Grazing: Same as Alternative III, except eliminating livestock related effects would enhance the natural condition of the WSA.

WILDERNESS MANAGEABILITY

Difficult to effectively manage due to irregular configuration and presence of existing vehicular ways around the perimeter.

RECREATION

Wilderness designation would eliminate vehicular dependent recreation activities on approximately eight miles of vehicular routes.

CULTURAL

Reduced livestock use and elimination of vehicular traffic and fuelwood cutting would slightly decrease degradation of cultural values.

Alternative IIIa - No Grazing: Elimination of livestock would decrease effects on cultural values.

MINERALS

Prohibition of new claims or leases after December 31, 1982 in designated wilderness would have no effect due to low potential for mineral development.

No mining claims or oil and gas leases in the area (11,565 acres).

Alternative IIIa - No Grazing: No significant impacts.

MANAGEMENT AREA 9:

RANGE

Same as present management.

Alternative IIIa - No Grazing: Elimination of grazing would cause existing perennial grass plants to improve in vigor and increase in basal area. Perennial grass seedling establishment would occur, but not in dense sagebrush sites.

FISH AND WILDLIFE

Authorization of 160 AUMs would have no significant impact on wildlife habitats or populations within the MA.

Discountinuing livestock grazing in all or portions of three allotments would improve cover for nongame and small game resulting in higher populations of these species and improved prey base for raptors and other predators.

Disposal of 8,000 acres of public lands through exchange area would allow the conversion of native range to agricultural uses. Small game and nongame populations and their beneficial effect on the food chain would be altered. Antelope would continue to utilize the summer range, but would feed heavily on alfalfa fields. Antelope depredation could become heavy. Overall effects of the conversion for antelope is insignificant to the population but would change distribution and feeding habits in the area. Flood irrigation systems would provide significant increases in waterfowl habitat.

Alternative IIIa - No Grazing: Elimination of all livestock grazing would improve cover for small game and nongame and provide additional prey base for raptors and other predators.

THREATENED AND ENDANGERED PLANTS

Same as Alternative I.

MANAGEMENT AREA 10:

RANGE

Continued implementation of three existing AMPs and development of seven or more additional AMPs would provide management to 87 percent of MA 10, to meet rangeland and other multiple use objectives. Fifteen miles of fence would create additional pastures enabling management to provide periodic growing season rest to pastures. Fences and additional water developments would improve overall distribution of livestock and reduce livestock use of concentration areas. Vigor of perennial forage plants would increase and production would increase in areas where space is available for natural reseeding and basal growth. In areas controlled by dense stands of big sagebrush and juniper the increase in perennial grass is limited. Ecological range condition would remain static where now in good and excellent range condition, and also where fair condition exists as dense sagebrush and juniper control these sites.

Land disposal would remove 230 AUMs from BLM authorization. Acquisition of additional lands in MA 10 within large allotments, due to land exchange discussed in MA 9 would increase acreage, water sources and forage available for allocation to livestock under BLM authorization.

Hard rock mineral exploration and development would cause livestock to leave the immediate area during human activity. This would cause slight shift in livestock use area, but no significant effects in the short term.

Woodcutting would release understory forage. Fallen slash would protect perennial grasses and seedlings to allow vigor and growth over several years while slash decomposes.

Alternative IIIa - No Grazing: Elimination of livestock grazing would cause an increase in the vigor of perennial grasses. Where space is available these grasses would increase in production and in number. Much of MA 10 is fully occupied by juniper or big sagebrush, Sandberg's bluegrass or annual grasses. In these areas significant changes in forage species composition would occur in the short term. In the long term existing juniper and sagebrush plants would continue to grow eventually crowding out understory grasses.

Ecological range condition would improve slightly where now in good and excellent condition, and also where fair condition exists as dense juniper and sagebrush control these sites reducing potential for increase in perennial grasses.

FISH AND WILDLIFE

Generally lower levels of livestock grazing with light utilization would improve residual vegetation in all habitats and provide for general increases in deer, small game, and nongame. Exclusion of livestock from meadow and riparian habitats would further enhance these habitats.

Development of six AMPs as in Alternative I.

Impacts from mineral development are discussed under Alternative I.

Wilderness designation for the entire Tule Mountain WSA would enhance wildlife populations and remove the mountain from vehicular access. Water sources on Tule Mountain would fall into disrepair through lack of maintenance and reduce water availability for wildlife. Deer distribution would concentrate toward remaining perennial water sources.

Disposal parcels totaling 2,760 acres of public land exclude all antelope habitat in Hencraft Field Allotment. Overall effects of land disposal to deer and antelope populations is negligible. See discussion in Alternative I.

Alternative IIIa - No Grazing: Elimination of all livestock grazing would provide for significant increases in available browse, forage, and cover. Populations of all big game, nongame, and small game would increase as a result of generally improving habitat conditions.

FUELWOOD

Slight decrease in future yield of fuelwood within the MA and the Planning Area, but within treatment areas there would be a significant decrease in future yield.

Alternative IIIa - No Grazing: No significant impacts.

TIMBER

Same as present management, except withdrawal of 151 acres of commercial timber land in the Tule Mountain Wilderness would reduce the Planning Area annual allocated cut by 16 MBF and reduce the per decade increase by 18 MBF.

Alternative IIIa - No Grazing: Same as present management.

WILDERNESS

All wilderness values within the WSA would be fully protected under the Wilderness Act.

Alternative IIIa - No Grazing: Wilderness values would be moderately enhanced as vegetation recovers from livestock grazing impacts.

WILDERNESS MANAGEABILITY

Difficult to manage due to inholdings, cherry-stemmed roads which penetrate to center of area and numerous ways into range improvements.

Alternative IIIa - No Grazing: No significant impacts.

RECREATION

Some hunting opportunities would be lost due to closure of approximately 20 miles of vehicular routes within the WSA area.

CULTURAL

Decreased livestock use would significantly lessen the degradation to cultural values, particularly around springs.

Slightly reduced degradation to cultural values by restricting vehicles around National Register sites.

Alternative IIIa - No Grazing: No impacts from livestock.

MINERALS

Disposal of 2,760 acres of public lands would have an insignificant effect to the minerals resource due to the low mineral potential in the area. Mineral rights would be retained where significant mineral values are found.

The Hayden Hill area would not be affected by land disposal due to its retention designation.

Mineral exploration and development would be prohibited within the Tule Mountain WSA (26,950 acres); however, there would be an insignificant effect due to the low mineral potential identified within the WSA.

No new claims or leases after December 31, 1983 would be allowed within the designated WSA. No known mining claims presently filed.

THREATENED AND ENDANGERED PLANTS

No significant impacts.

Alternative IIIa - No Grazing: No significant impacts.

MANAGEMENT AREA 11:

RANGE

Existing light utilization patterns throughout MA 11 would encourage continued vigor of perennial grasses to stabilize the forage plant base and ecological range condition.

Alternative IIIa - No Grazing: No significant change in the short term from elimination of grazing. However, in the long term a gradual improvement in ecological range condition over time would occur where space is available for the increase in production and number of perennial grasses.

FISH AND WILDLIFE

Disposal of 120 acres would have no significant impact to deer use.

Alternative IIIa - No Grazing: Removal of livestock from the parcels would have minor positive effects by increasing residual browse after the grazing season. Most deer utilizing these areas feed on adjacent agricultural lands.

TIMBER

Same as Alternative II.

Alternative IIIa - No Grazing: Same as present management.

CULTURAL

Continued livestock trampling would continue to slightly degrade cultural values.

No significant disturbance from OHV use.

THREATENED AND ENDANGERED PLANTS

No significant impacts.

Alternative IIIa - No Grazing: No significant impacts.

Alternative IV - Continue Present Management

MANAGEMENT AREA 1:

RANGE

Medusahead has displaced perennial species over most of MA 1. Present management would cause no change in forage species composition or production. No change in ecological range condition would occur.

FISH AND WILDLIFE

Deer and antelope habitats would remain static. The deer population and numbers of deer utilizing public lands would remain stable. Antelope populations would continue general upward trend.

Fisheries habitats would continue to improve in the Fitzhugh Creek exclosure. Portions of Fitzhugh Creek outside the exclosure where soils are subject to erosion would continue slight decline. Fisheries habitat on Pine Creek would remain in stable condition.

TIMBER

Intensive management practices would increase timber productivity on commercial timber lands by replacing over and under stocked, poorly growing stands with young, well-stocked stands. Approximately 7 MBF per decade would be added to the allowable cut as a result of proposed management practices on 57 acres.

WATERSHED

Management along Fitzhugh Creek would significantly increase aquatic and riparian habitat and improve water quality. No change in water quality along Pine Creek.

Present location and design of Tablelands road network would continue to limit the access to this area, as well as increase maintenance costs.

CULTURAL

Continued livestock trampling and OHV use would continue to slightly damage cultural values, particularly around springs.

MANAGEMENT AREA 2:

RANGE

Allotments presently overstocked and used with no provision for periodic growing season rest, cattle congregation on loamy flats would continue slight downward trend in ecological range condition as perennial plants lose vigor and sagebrush and cheatgrass continue active growth. On uplands and tuff sites, range trend would remain static to slightly upward as these areas are not overused under present management. Revision of North Graves and Mackey AMPs would include additional fencing along topographic boundaries to create additional pastures, construction of one waterhole, and the burning and seeding of 1,000 acres. A revised grazing system to lengthen the season of use for the allotments while providing periodic growing season rest would prevent the concentration of cattle on loamy flats and improve livestock distribution. Increase of forage through vegetation treatment and improved distribution on upland sites would occur. Those allotments not presently overstocked would continue existing static to slightly upward trend in forage condition. Burn and release of 4,000 acres in South Graves AMP would provide additional livestock forage in an AMP.

Woodcutting would continue to release understory forage. Fallen slash would protect perennial grasses and seedlings to allow vigor and growth over several years while slash decomposes.

FISH AND WILDLIFE

Browse areas in deer winter range would continue to decline due to the effects of juniper encroachment on this resource. Overall herd condition would decline as available browse becomes a limiting habitat factor.

All other wildlife habitats and populations would remain generally static.

FUELWOOD

No significant impacts.

TIMBER

Intensive management practices would increase timber productivity on commercial timber lands by replacing over and under stocked, poorly growing stands with young, well-stocked stands. Approximately 10 MBF per decade would be added to the allowable cut as a result of proposed management practices on 83 acres.

CULTURAL

Continued livestock trampling and OHV use would continue to slightly damage cultural values, particularly around springs.

THREATENED AND ENDANGERED PLANTS

No significant impacts.

MANAGEMENT AREA 3:

RANGE

Existing light utilization patterns throughout most of the MA would encourage continued vigor of perennial grasses to stabilize the forage plant base in the understory of the juniper woodland. Where annual grasses have invaded, as in the southern part of Strip Allotment, present management would cause no significant change in forage species composition or production. Removal of excess wild horses and burros (in accordance to the Devil's Garden Plateau Wild Horse Management Plan) would reduce grazing pressure and utilization levels year round on Strip Allotment caused by current overpopulation of horses, providing increased vigor and production to perennial forage. Woodcutting on Rimrock allotment would continue to release understory forage. Fallen slash would protect perennial grasses and seedlings to allow vigor and growth over several years while slash decomposes.

FISH AND WILDLIFE

Wildlife habitats would remain relatively stable with no overall changes in antelope, deer, small game, or nongame populations. Light livestock utilization would continue to provide sufficient cover, forage, and browse.

Meadow and riparian habitats would remain generally stable or decline slightly under current livestock grazing levels. No significant effects on small game and nongame populations.

FUELWOOD

No significant impacts.

TIMBER

Intensive management practices would increase timber productivity on commercial timber lands by replacing over and well stocked, poorly growing stands with young, well-stocked stands. Approximately 3 MBF per decade would be added to the allowable cut as a result of proposed management practices on 22 acres.

CULTURAL

Continued livestock trampling and OHV use would damage cultural resource values. Livestock degradation to sites would intensify around springs (Rattlesnake and Noble).

MANAGEMENT AREA 4:

RANGE

Existing light utilization patterns throughout most of the MA would encourage continued vigor of perennial grasses to stabilize the forage plant base in good and fair condition. Range sites in fair ecological range condition are fully occupied by annual grasses and Sandberg's bluegrass preventing revegetation by other perennial grasses. Crowder allotment would receive heaviest use along riparian areas year after year, causing a decline in forage production and ecological range condition over time. Uplands would maintain vigor and production. Woodcutting would continue to release understory forage. Fallen slash would protect perennial grasses and seedlings to allow vigor and growth over several years while slash decomposes.

FISH AND WILDLIFE

Wildlife habitats would remain relatively stable with no overall changes in antelope, deer, small game, or nongame populations. Light livestock utilization would continue to provide sufficient cover, forage, and browse.

Meadow and riparian habitats would remain generally stable or decline slightly under current livestock grazing levels. No significant effects on small game and nongame populations.

FUELWOOD

No significant impacts.

TIMBER

Intensive management practices would increase timber productivity on commercial timber lands by replacing over and under stocked, poorly growing stands with young, well-stocked stands. Approximately MBF per decade would be added to the allowable cut as a result of proposed management practices on 488 acres.

MANAGEMENT AREA 5:

RANGE

Continuing present management by authorizing 1,947 AUMs and allowing 50-60 percent utilization levels would result in no significant change in vegetation.

FISH AND WILDLIFE

Wildlife habitats would remain relatively stable with no overall changes in antelope, deer, small game, or nongame populations. Light livestock utilization would continue to provide sufficient cover, forage, and browse.

Meadow and riparian habitats would remain generally stable or decline slightly under current livestock grazing levels. No significant effects on small game and nongame populations.

FUELWOOD

No significant impacts.

CULTURAL

Continued livestock trampling and OHV use would continue to slightly damage cultural values, particularly around springs.

MANAGEMENT AREA 6:

RANGE

Maintaining present livestock use by authorizing 80 AUMs would have no effect on the existing forage conditions. Intensive timber management, including precommercial thinning, timber sales, reforestation and brush manipulation would open up areas for better access by livestock.

FISH AND WILDLIFE

Same as Alternative I.

TIMBER

Intensive management practices would increase timber productivity on commercial timber lands by replacing over and under stocked, poorly growing stands with young, well-stocked stands. Approximately 224 MBF per decade would be added to the allowable cut as a result of proposed management practices on 1,854 acres.

MANAGEMENT AREA 7:

RANGE

Continuing present livestock use by authorizing 5,386 AUMs, along with present season of use and utilization levels would create no significant change in vegetation. In areas where prescribed burning is planned by the wildlife program, existing perennial grasses would increase in vigor. In areas where annual grasses, sagebrush and other brush species are removed, perennial grass seedlings would be established.

FISH AND WILDLIFE

Continuation of present management would have no significant effects on wildlife habitats and populations.

Deer and antelope habitats would remain static. Deer populations and numbers of deer utilizing public lands would remain stable. Antelope populations would continue general upward trend.

Meadow and riparian habitats would continue downward trend due to erosion in Sheep Valley and continued impacts to bank cover and water quality in Horse and Russell Dairy creeks.

FUELWOOD

No significant impacts.

TIMBER

Intensive management practices would increase timber productivity on commercial timber lands by replacing over and under stocked, poorly growing stands with young, well-stocked stands. Approximately 130 MBF per decade would be added to the allowable cut as a result of proposed management practices on 1,075 acres.

WATERSHED

The lack of special management in riparian and meadow areas would provide no protection or consideration of riparian and meadow values.

Increased gullying would continue to occur. Other meadow areas would continue to show degradation during low rainfall years or when livestock use is concentrated.

CULTURAL

Continued livestock trampling and OHV use would slightly degrade cultural values, particularly around spring sources.

MINERALS

No significant impacts.

MANAGEMENT AREA 8:

RANGE

Continuing levels of livestock use at 285 AUMs, present season of use, and utilization at light to moderate levels would cause no significant changes in vegetation.

FISH AND WILDLIFE

Continuation of present management would have no significant effects on wildlife habitats and populations.

Deer and antelope habitats would remain static. Deer populations and numbers of deer utilizing public lands would remain stable. Antelope populations would continue general upward trend.

FUELWOOD

No significant impacts.

WILDERNESS

Wilderness values within the WSA would not be protected under the Wilderness Act.

WILDERNESS MANAGEABILITY

No significant impacts.

RECREATION

No significant impacts.

CULTURAL

Continued livestock trampling and OHV use would continue to slightly damage cultural values, particularly around springs.

MINERALS

No significant impacts.

MANAGEMENT AREA 9:

RANGE

Maintaining present livestock use by licensing 160 AUMs during present season of use and limiting utilization to light use would cause no significant change in vegetation.

FISH AND WILDLIFE

Antelope habitat would continue to support increasing numbers of antelope until the upward population trend levels.

THREATENED AND ENDANGERED PLANTS

No significant impacts.

MANAGEMENT AREA 10:

RANGE

Continuation of present management in MA 10 would allow the implementation of Nelson Corral, Tule Lake and Cold Springs AMPs. Additional waters would be developed to improve distribution of livestock and reduce the concentration of livestock in problem areas. Prescribed burns in juniper and big sagebrush to release understory forage would significantly increase the quantity of good forage available to livestock, causing an improvement in ecological range condition and livestock forage condition. In areas outside the three existing AMPs, scattered problems with poor livestock distribution and invasion and encroachment of big sagebrush and juniper would continue. Scattered areas of overuse would decline in both ecological and forage condition. Utilized areas would maintain their vigor of perennial grasses to stabilize the forage plant base. In the long term, existing sagebrush and juniper plants would continue to grow to the elimination of understory grasses.

Acquisition of additional lands in MA 10 within large allotments, due to land exchange described in MA 9, would increase acreage, water sources and forage available for allocation to livestock under BLM authorization.

Hard rock mineral exploration and development would cause livestock to leave the immediate area during human activity. This would cause a slight shift in livestock use area, but no significant effects.

Woodcutting would release understory forage. Fallen slash would protect perennial grasses and seedlings to allow vigor and growth over several years while slash decomposes.

FISH AND WILDLIFE

Deer populations would remain static while antelope continue upward trend. Meadow habitats would continue to be affected as no protection for these habitats is in place. Riparian habitat along Dry Creek would continue to decline.

FUELWOOD

No significant impacts.

TIMBER

Intensive management practices would increase timber productivity on commercial timber lands by replacing over and under stocked, poorly growing stands with young, well stocked stands. Approximately 160 MBF per decade would be added to the allowable cut as a result of proposed management practices on 1,323 acres.

WILDERNESS

Wilderness values would continue to degrade slightly from vehicular traffic and fuelwood harvest.

WILDERNESS MANAGEABILITY

No significant impacts.

RECREATION

No significant impacts.

CULTURAL

Continued livestock trampling and OHV use would continue to slightly degrade cultural resources.

MINERALS

No significant impacts.

THREATENED AND ENDANGERED PLANTS

Slight disturbance to sensitive plants from livestock trampling and vehicular traffic.

MANAGEMENT AREA 11:

RANGE

Same as Alternative III.

FISH AND WILDLIFE

Under current management, deer use of the parcels as cover and browse would continue. Deer winter populations in these areas would remain static.

TIMBER

Intensive management practices would increase timber productivity on commercial timber lands by replacing over and under stocked, poorly growing stands with young, well stocked stands. Approximately 27 MBF per decade would be added to the allowable cut as a result of proposed management practices on 222 acres.

CULTURAL

Continued livestock trampling and OHV use would continue to slightly damage cultural values, particularly around perennial water sources.

THREATENED AND ENDANGERED PLANTS

No significant impacts.

Table 4-1

Socioeconomic Impacts Area Wide

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE	- Maximum potential increase in livestock forage use would be the equivalent of enough forage to feed approximately 2,500 cattle year round. That would be an increase of 2 percent to Modoc and Lassen Counties' present cattle numbers. Approximately 50 of the livestock permittees would be benefitted substantially. - Thirty-two permittees would be affected by the loss of grazing use of allotments through land disposal. Impacts would range from slight adverse effect to significant adverse effect.	- Little change for most operators unless additional forage became available through range improvement projects and monitoring. The effect of the additional forage would be similar to Alternative I, though not as great. - Twenty-nine permittees would be affected by the loss of grazing use of allotments through land disposal. Impacts would range from slight adverse effect to significant adverse effect.	- The decrease in livestock forage would be the equivalent of enough forage to feed 1,350 cattle year round. This would be about a one percent decrease in Modoc and Lassen Counties' cattle numbers. - Thirteen permittees would be affected by the loss of grazing use of allotments through land disposal. Impacts would range from slight adverse effect to significant adverse effect. <u>Alternative IIIa - No Grazing</u> - Public lands play a very important role by providing spring range to local livestock operators. Removal of this critical link through selection of the no grazing alternative would severely reduce available spring forage for livestock. Without public range to move livestock onto, many operators would have to buy additional hay, not usually available at this time of year. In addition, these livestock would remain on home ranches delaying by one or more months the irrigation	- No significant impacts.

Table 4-1 (continued)

Socioeconomic Impacts Area Wide

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE (continued)			of hay meadows. This delay in hay production in the short (90 to 120 day) growing season would significantly reduce annual hay production affecting the amount of feed available through the following winter. Calf diseases would be significantly higher if cattle stayed on meadows. - Public lands used in the summer provide a major portion of livestock forage to many livestock operators. Removal of critical spring and/or summer forage on public range would force operators to make substantial adjustments in their operations and in some cases to go out of business. - The decrease of livestock forage would be equivalent to the loss of enough forage to feed 4,100 cattle year round. A reduction of about three percent of Modoc and Lassen Counties' cattle numbers.	

Table 4-1 (continued)

Socioeconomic Impacts Area Wide

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
RANGE (continued)			- In addition, there would be loss of use of adjacent private lands where livestock access is across public lands. The cost of fencing the public lands to prevent livestock access has not been estimated but is expected to be substantial and would add significantly to the operation costs of the adjacent private landowners who graze livestock. - The effect of no grazing would affect 99 permittees. Adverse impacts to permittees would range from slight to significant in proportion to the dependency of their operation on public lands.	
TIMBER	- Disposal of 97 acres and reinstatement of 7 acres of timber base land would result in a decrease to 560 MBF of timber contributed to the economy per year. - Three jobs would be created or maintained. An additional 11 jobs would be provided through indirect employment. This would amount to less than 0.01% of the regional employment.	- Disposal of 327 acres of timber base land would result in a decrease to 534 MBF of timber contributed to the economy per year. - Three jobs would be created or maintained. An additional 11 jobs would be provided through indirect employment. This would amount to less than 0.01% of the regional employment.	- Disposal of 304 acres and withdrawal of 151 acres in the Tule Mountain WSA (timber base lands) would result in a decrease to 519 MBF of timber contributed to the economy per year. - Three jobs would be created or maintained. An additional 11 jobs would be provided through indirect employment. This would amount to less than 0.01% of the regional employment.	- 570 MBF of timber would be contributed to the economy per year. - Three jobs would be created or maintained. An additional 11 jobs would be provided through indirect employment. This would amount to less than 0.01% of the regional employment.

Table 4-1 (continued)

Socioeconomic Impacts Area Wide

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
TIMBER (continued)	- Timber sale receipts would be $29,276.80 per year. Approximately $1,171.07 per year would be returned to the State of California. - Revenue cost ratio of 1.5:1 would continue.	- Timber sale receipts would be $27,917.52 per year. Approximately $1,116.70 per year would be returned to the State of California. - Revenue cost ratio of 1.5:1 would continue.	- Timber sale receipts would be $27,392.82 per year. Approximately $1,095.71 per year would be returned to the State of California. - Revenue cost ratio of 1.5:1 would continue. Alternative IIIa - No Grazing Same as Alternative III.	- Timber sale receipts would be $30,084.60 per year. Approximately $,1203.38 per year would be returned to the State of California. - Revenue cost ratio of 1.5:1 would continue.
LANDS[1/]	- Disposal of 17,400 acres of public lands would result in a one-time increase in federal revenues in the range of $1,740,000 to $8,700,000. - Disposal of the unmanageable tracts would have an unquantifiable monetary benefit to the government. These parcels would no longer require expenditure of funds for resource management or improvement. - Disposal would also allow private landowners to incorporate the isolated tracts into existing grazing, agriculture and/or	- Same as Alternative I, except: Disposal of 17,270 acres of public lands would result in a one-time increase in federal revenues in the range of $1,727,000 to $8,635,000.	- Same as Alternative I, except: Disposal of 6,310 acres of public lands would result in a one-time increase in federal revenues in the range of $631,000 to $3,155,000. Alternative IIIa - No Grazing No significant impacts.	- Retention of isolated, and uneconomically managed public lands would result in further expenditure of federal revenues. Extensive coordination with private landowners, and improvements such as fences, reservoirs, access, etc., would be required to alleviate trespass and improve the manageability of these parcels.

1/ The dollar figure for land disposal was based on land values that would range from $100 to $500 per acre depending on size, location, and topography characteristics of each parcel.

Table 4-1 (continued)

Socioeconomic Impacts Area Wide

Issue	Alternative I Maximized Production	Alternative II Balanced	Alternative III Maximized Protection	Alternative IV Continue Present Management
LANDS (continued)	other uses currently developed on adjacent private lands. Private management and improvements could proceed in accordance with each landowners' planning and capabilities.			

MITIGATION MEASURES

The following mitigation measures are intended to help reduce or eliminate adverse impacts identified in this chapter. These include specific measures in addition to those already described under Standard Operating Procedures, pages 2-50--2-52. All mitigation measures pertaining to the selected alternatives will be considered.

1. Increases in authorized livestock use for allotments or pastures not affected by vegetation conversion projects will be made initially in increments on a temporary nonrenewable basis, in order to assess the impacts of increased livestock use. After sufficient data has been collected and analyzed, a portion or all of the Suspended Nonuse AUMs may be reinstated. In areas where vegetation conversion is successful, an increase in livestock AUMs may occur after one to three years (Alternatives I and II).

   This mitigation measure will prevent active preference from being increased to a level that would harm other resources before the impacts are known.

2. Livestock turnout areas will be rotated from year to year in AMP allotments, or where turnout areas stay the same, the period of use will not exceed three weeks.

   This mitigation measure will prevent persistently heavy livestock concentration in specific areas, thus enhancing the distribution and utilization of preferred forbs and browse species.

3. Salt or mineral blocks and spring developments will be located and designed to encourage livestock use away from spring meadows (Alternatives I, II, and III). Where monitoring shows that livestock grazing continues to degrade meadow values, fencing and/or rehabilitation will be considered.

   Spring meadows provide important wildlife habitat and contain watershed values easily disturbed by excessive concentrations of livestock. This mitigation measure will minimize livestock trampling and vegetation destruction within these spring meadows and ensure further protection, if needed.

4. For all proposed seedings (Alternative I and II), suitable perennial forbs, grasses, and browse will be included in the seed mixture and about 20 percent of the total area treated will be left in native vegetation to provide interspersion within the seeded area.

   These measures will reduce the loss of pronghorn spring forage caused by seedings, maintain habitat diversity, and prevent the displacement of wildlife.

5. Exclosures to livestock will be actively maintained by BLM and will be constructed with a gate.

   Good maintenance will ensure that a good fence is there to keep cattle, including calves, out and the gate can be used to release animals that may become trapped inside.

6. Vegetation treatment areas by prescribed burn or aerial spray application will contain watershed areas where necessary to protect bitterbrush, mahogany, or other browse and cover stands.

   These species are vital to wintering deer populations and are very difficult to reestablish after treatment.

7. The Best Management Practices for protection of water quality will include site-specific mitigation measures and management prescriptions (Alternatives I, II, and III).

8. Use of check dams or other erosion control structures will be used to decrease accelerated erosion resulting from livestock grazing or other management activities (Alternative II and III).

9. Potential disposal of public lands supporting populations of sensitive plants will receive further consideration, analyzing the impacts disposal would have on these and any other discovered sensitive plant species.

UNAVOIDABLE ADVERSE IMPACTS

Alternative I - Maximized Production

- 56,290 acres of soil and vegetation affected by land treatments.
- Decline in wildlife habitat condition and populations.
- Continued deterioration of riparian and meadow habitat.
- Moderate affects on wilderness quality.
- Loss of timber revenues from removal of commercial forest land from timber base.
- Significant on-site decrease of fuelwood availability on a sustained yield basis within conversion project sites.
- Accelerated degradation of cultural resources.

Alternative II - Balanced

- 56,290 acres of soil and vegetation affected by land treatments.
- Continued suppression of riparian and meadow habitat where not fenced.
- Minor but allowable affects on wilderness quality.

- Continued moderate degradation of cultural resources.
- Slight decrease of fuelwood availability from restricted cutting on National Register sites and districts, T&E plant populations, and Sheep Valley.
- Moderate reduction in productivity on 7 acres of commercial forest lands.
- Slight reduction in productivity on 18 acres of commercial forest lands.
- Loss of timber revenues from removal of commercial forest lands from the timber base.

Alternative III - Maximized Protection

- Continued slight suppression of riparian and meadow habitat where not fenced.
- Continued but decreased degradation of cultural resources.
- Moderate reduction in productivity on 7 acres of commercial forest lands.
- Slight reduction in productivity on 18 acres of commercial forest lands.
- Loss of timber revenues from removal of commercial forest lands from timber base.
- Moderate reduction in productivity of 151 acres of commercial forest in Tule Mountain Wilderness Study Area.
- Slight decrease of fuelwood availability from prohibiting cutting from all National Register sites and districts, T&E plant populations, and designated WSAs, and Sheep Valley ACEC.

Alternative IIIa - No Grazing

- Loss of 3% of cattle numbers from Lassen and Modoc Counties.
- 99 ranches dependent on BLM grazing lands within the Planning Area (from 0.3% to 44% for livestock forage) would lose a viable part of their operation; some would not survive as economic entities.

Alternative IV - Continue Present Management

- 38,400 acres of soil and vegetation affected by land treatment.
- Slow decline in wildlife habitat condition and populations.
- Continued deterioration of riparian and meadow habitat.
- Continued water quality degradation.
- Minor but allowable impacts on wilderness quality.
- Continued degradation of cultural resources.
- Slight decrease of fuelwood availability from restricted cutting on National Register sites and districts, and T&E plant populations.
- Moderate reduction in productivity on 7 acres of commercial forest lands.
- Loss of timber revenues from removal of commercial forest lands from timber base.

SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

This section identifies the trade-offs between short-term use and long-term productivity of the resources involved in the four alternatives. For this analysis, "short-term" refers to the period of project implementation within about five years, and "long-term" refers to the period 20 years or beyond in which the proposals' adverse or beneficial impacts would still occur.

For Alternatives I, II and IV, there would initially be about 56,290; 56,290; and 38,400 acres, respectively, affected by vegetation treatments. In the short term, stocking levels would be adjusted to provide adequate rest for rehabilitating forage species. Livestock forage productivity would increase significantly. The improved forage condition along with continued vegetation treatments would insure the effected allotments of reaching their forage producing potential in the long term.

In the short term, Alternative III would allow improvement in deer, pronghorn, and sage grouse habitat condition and hunting opportunities. In the long-term, the habitat condition and hunting opportunities would decline as plant communities moved toward climax.

In the short-term, big game forage and habitat would increase due to vegetation manipulation projects in Alternatives II and III. In the long-term, after vegetation has reestablished, the same trends toward climax condition would continue. Vegetative manipulation would result in short-term reduction of seral stage and corresponding short-term and mid-term increases in wildlife habitat.

Alternative I identifies large acreages for disposal. Significant loss of habitat for big game in winter range would result from these disposals.

Degradation of cultural resources would continue under all alternatives in the short-term. In the long-term, there would be more stabilization of cultural resource sites due to decreased erosion and management facilities.

Intensive forest management practices, including timber sales and forest development projects, would consume forest resources but would lead to healthier, more vigorous, and increased production of timber stands (all alternatives).

Harvest of juniper above the level of sustained yield would have a negative affect upon the future supply of juniper products. This is expected to occur on juniper cutting areas designated for range and wildlife habitat improvement.

Possible trail construction and use of heavy equipment to repair gullies in Sheep Valley would cause short-term impacts on soil condition. Long-term result is a significant increase in meadow values (Alternatives II and III).

Realignment of roads (Alternative III) on the tablelands would take additional land out of productivity due to increased road surface. Partial recovery of abandoned alignment would occur in the long-term.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

This section identifies the extent to which the four alternatives would irreversibly limit potential uses of the land and resources. Irreversible and irretrievable commitments of resources occur when a wide range of future options are foreclosed.

Woodland to rangeland conversion projects would commit juniper resources for the life of the projects (Alternatives I, II, III and IV).

The harvest of woodland products and associated revenues from woodlands would be lost within designated WSAs (Alternatives II and III).

The timber harvest potential and associated revenues from those commercial forest lands within the designated WSA would be irreversibly and irretrievably committed (Alternative III).

All negative affects on cultural resources would result in irretrievable losses of information (all alternatives).

Disposal of public lands would result in an irreversible and irretrievable loss of administrative control and public use for all resource values except mineral values on those parcels.

Chapter 5

Public Participation

Chapter 5

CONSULTATION AND COORDINATION

PUBLIC INVOLVEMENT

Consultation and coordination with the public and public agencies was a planned and integral part of the development of the management alternatives analyzed in the draft and final EIS.

Following is a summary of the consultation, coordination, and public participation in the EIS process:

- A Notice of Intent to prepare the Alturas Resource Area Management Plan/EIS was published in Federal Register on February 1, 1980 and filed with the California State Clearinghouse.
- Preplanning analysis completed. Available for public review in April, 1980.
- Public meetings were conducted on March 18 and 19, 1980 in Susanville and Alturas to identify significant issues to be addressed in the planning process.
- Issues consolidated and distributed for public comment on January 6, 1981.
- Newsletter outlining planning process published and distributed to the public in August, 1981.
- Newsletter identifying planning criteria was published and distributed to the public in September, 1981.

Oral as well as written comments received throughout the planning process were used in the final development of alternatives analyzed in the Draft EIS. These comments are on file and available for public review in the BLM Susanville District's Alturas Resource Area Office.

The Draft EIS was filed with the Environmental Protection Agency (EPA) and their notice of availability was published on April 15, 1983. Additionally, on April 13, 1983, BLM published a Notice of Availability for the Draft EIS in the Federal Register.

A 90-day public comment period was given ending July 15, 1983.

The Wilderness Public Hearing Notice was published in the Federal Register on April 20 and April 28, 1983.

COORDINATION IN THE REVIEW OF THE ENVIRONMENTAL IMPACT STATEMENT

Requests for comments on the DEIS were made of the following interest groups and agencies: (An asterisk indicates those who responded to the DEIS).

CONGRESSIONAL

California

Norman Shumway
Alan Cranston
Pete Wilson
Ray Johnson
Stan Statham

GOVERNMENT

Federal

U.S. Forest Service - Lassen and Modoc National Forests*
Soil Conservation Service*
Fish and Wildlife Service (Tule Lake Basin)
Advisory Council on Historic Preservation
Heritage Conservation and Recreation Service
Modoc Refuge
North Cal-Neva RCD

State

California Department of Fish and Game*
California State Historic Preservation Officer
California Division of Forestry
Lahontan and Sacramento Regional Water Quality Control Boards
Native American Heritage Commission
California Department of Water Resources

County

Lassen County Supervisors
Lassen County Planning Commission
Lassen County Extension Agent
Modoc County Supervisors
Modoc County Planning Commission
Modoc County Extension Agent
Modoc County Road Department
Lassen County Agricultural Commission
Lassen County Road Department
Modoc County Agricultural Commission

INTERESTED GROUPS/ORGANIZATIONS

Environmental

NRDC*
Sierra Club - Reno - Sacramento*
Wilderness Society - Reno
Northern California Wilderness Coalition*
California Native Plant Society

Historical, Archaeology

Native American Heritage Advisory Committee (Susanville)
Lassen County Historical Society
Modoc County Heritage Society

Livestock

Modoc County Cattlemen's Association
Lassen County Cattlemen's Association
District Grazing Advisory Board
Alturas Resource Area Operators
Modoc Grazing Advisory Board

Mineral

Lakeview Gem and Mineral Society
Lassen County Mineral and Gem Society
Modoc Gem and Mineral Society

Recreational

Hot Wheels 4X4 Club
Glass Mountain Four-Wheelers
Ed Crawford, NOLOC
Lassen Motorcycle Club

Forestry

Paul Bunyan Lumber Company
Collins Pine Company
Roseburg Lumber Company
Main Industries Inc.
Coin Lumber Company
Publishers Forest Products
Pasternak Logging
Sierra Pacific Industries
Surprise Valley Lumber Company
Goose Lake Timber Company

University

Jim Linebaugh, University of Nevada
Jim Clawson, University of California
Dick Ekhart, University of Nevada
Wayne Burkhardt, University of Nevada

Wild Horses and Burros

Wild Horse Organized Assistance
International Society for the Protection of Wild Horses and Burros

Wildlife

Lassen County Fish and Game and Recreation Commission
Lassen Organized Sportsmen
Eagle Lake Audubon
Lassen Fin and Antler Club
Modoc Rod and Gun Club

Other

Chambers of Commerce
Calandor Pine Corporation
Citizens Utilities
Edgerton Lumber
Farm Bureau
Garden Club
Modoc County Sportsmen
Pit River Home and Agriculture Association
Pit River Tribal Council
Pacific Power and Light Company
Public Lands Council
Rod and Gun Club
Rotary International
Surprise Valley Electric

AVAILABILITY OF FINAL ENVIRONMENTAL IMPACT STATEMENT

The Final Environmental Impact Statement (FEIS) will be mailed to those who participated in the EIS process including those who commented on the DEIS. A general news release will be printed in the Federal Register and issued to the newspapers when the FEIS is available. Copies of the FEIS will be available for review at the Susanville District, Alturas Resource Area, and State Offices at the following locations:

BUREAU OF LAND MANAGEMENT OFFICES

Office of Public Affairs, BLM
18th and C Streets
Washington, D.C. 20240

California State Office
2800 Cottage Way
Sacramento, CA 95825

Susanville District Office
P. O. Box 1090
705 Hall Street
Susanville, CA 96130

Alturas Resource Area Office
P. O. Box 771
Centerville Road
Alturas, CA 96101

PUBLIC LIBRARIES

Lassen County Library
South Roop Street
Susanville, CA 96130

Alturas County Library
212 W. 3rd Street
Alturas, CA 96101

INTRODUCTION TO RESPONSES

All letters were reviewed to determine if they met the required criteria for response, i.e., discussion of the adequacy of the DEIS. Substantive comments which presented new data, questioned facts and or analyses, or commented on issues bearing directly on the DEIS or the environmental impacts of the alternatives were fully evaluated and given responses. Changes or additions have been incorporated into this final statement.

Comments and related responses are identified by the number of the comment letter and the number of the comment in that letter.

A total of 67 interested citizens, federal and state agencies, and private organizations submitted comments on the DEIS as of July 15, 1983. Fifty-three of these letters were written comments addressing the wilderness study areas, and two oral comments were received at the wilderness hearing on May 23, 1983.

Thirty letters recommending a specific wilderness alternative but not questioning the adequacy of the EIS, were not printed in the FEIS. These comments will be considered during the decision process following the FEIS. The following summarizes the wilderness comments:

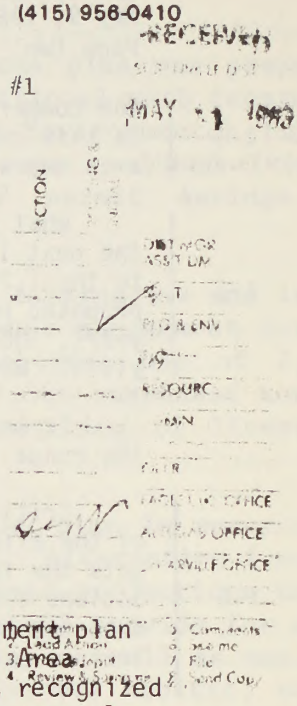
- 45 comments recommended Alternative III (Preservation).
- 4 comments recommended Alternative II (Balanced).
  - 2 addressed the Pit River Canyon WSA
  - 2 addressed the Tule Mountain WSA and the Pit River Canyon WSA.
- 1 comment recommended Alternative I, addressing the Pit River Canyon WSA.
- 2 comments proposed a new alternative for the Pit River Canyon WSA.
- 1 comment took no position but talked of the adequacy of wilderness.

The oral comments received at the wilderness hearing have been printed and follow the comment letters and responses in the FEIS. All comments are available for inspection at the Alturas Resource Area and Susanville District Offices.

TELEPHONE
(415) 956-0410

WESTERN TIMBER ASSOCIATION

211 SUTTER STREET, SAN FRANCISCO, CALIFORNIA 94108



May 9, 1983
File No. 2.4222

Mr. C. Rex Cleary
District Manager
Bureau of Land Management
P. O. Box 1090
Susanville, CA. 96130

Dear Mr. Cleary:

We have received for comment the draft resource management plan and environmental impact statement for the Alturas Resource Area. Although, timber is not a major resource in the area, it is recognized in the document, and we feel it is necessary to submit both general and specific comments.

1-1 It is difficult to view the document as a plan. In fact, the plan and environmental impact statement should be two separate documents. There are no general standards and guidelines or management direction for each management area. The degree to which the proposed plan responds to the issues and goals is vague.

1-2 The range of alternatives is inadequate. As a minimum they should be: (1) maximize market outputs; (2) maximize market and non-market outputs; (3) emphasize wildlife and fish production; (4) maximize Wilderness; (5) custodial management; (6) current direction. Using the term "balanced" to describe an alternative, particularly when there are only three others, prejudices the reader and makes it obvious which one will be the preferred alternative. Any further statements on the alternatives will be considered as supporting a predetermined decision.

1-3 From the information provided in the document, no objective analysis of alternatives appears to have been done. Certainly no economic analysis was done. Consequently, the reader is left in the dark as to whether or not the preferred alternative is in fact the best one. No data are provided to show the trade-offs among the alternatives. The environmental consequences described in chapter 4 generally are so vague as to be meaningless. In short, the document does not meet the full disclosure requirements of the National Environmental Policy Act (NEPA).

1-4 While there are only 5,124 acres of commercial forest land in the planning area, it appears to be the intent of the plan that it be managed intensively. However, there is no description of what this means. Will

1-4 Cont. the commercial forest in each management area be managed intensively? Is this reasonable in management area one with 57 acres or management area two with 83 arces? What type of silviculture will be applied?

1-5 What are the expected yields in volume and dollars annaully for the next 10 years? What special techniques, if any, will be applied to the 1,240 acres of plantations in management area six? Under the proposed practices, what will these lands be like after 10 years, 50 years, 100 years, etc.? What is the anticipated long run sustained yield? When will it be attained?

It would appear that similar questions could be asked regarding the range resource, which is much more important than timber.

1-6 Critical information which is necessary for public understanding of the effects generated by implementing the plan are not shown. One gets the impression that no one has really thought about the specific actions that will be taken to achieve certain objectives. Indeed, it does not appear that anyone has developed specific management objectives in order to achieve the goals for the area for a specified period of time.

1-7 Finally, there needs to be more discussion on how this plan relates to the one being prepared by the Modoc National Forest and the anticipated joint impacts of these plans on the socio-economic situation of the area.

In summary: There is nothing presented that appears to be a plan.

The range of alternatives is inadequate to meet the requirements of NEPA .

The full disclosure requirements of NEPA are not met.

There apparently has been no active coordination with the Forest Service.

The questions and impressions here are based on the document received. If there is information to respond or to the contrary, we highly recommend that it be put into the final environmental impact statement.

Sincerely,

Richard G. Reid

Richard G. Reid
Vice President
Information and Environment

RGR:dm

cc: Mr. Ed Hastey-BLM, Sacramento

Response to Letter No. 1

1-1 Bureau regulations (CFR 1610.4-8) under which the plan was prepared leave considerable discretion to the preparing official with regard to format. The draft Resource Management Plan and Environmental Impact Statement analyzing the effects of the plan were combined into a single document to eliminate duplication and permit savings in preparation time and priority costs.

Management direction for each MA is described by alternative and issue in Table 2-1. For example, the objective for range management for MA 1 under Alternative I on page 2-2 is to "Authorize use of 7,301 livestock AUMs with authorization to use up to 7,506 suspended nonuse AUMs as determined to be available through monitoring of livestock forage."

1-2 A wide range of alternatives were examined in the plan in accordance with the criteria developed on pages 1-7 and 1-8. Alternative I would maximize range and timber production to meet demand projections under sustained yield. Alternatives II, III, and IV would provide for more balanced use; preservation of wildlife and habitat as well as maximum protection of archaeological values, wetland/riparian habitat, water and visual quality; and continuation of present management.

1-4 The primary objective of the timber program is to produce the maximum amount of raw material from forest lands classified as capable for timber production subject to the principles of multiple use, sustained yield, and maintenance of environmental quality. This would be accomplished by implementing intensive forest management practices on all commercial forest land, which might include site preparation, planting, and precommercial thinning. (See Glossary, page GL-4.) Several silvicultural systems would be used, ranging from selection, shelterwood, and seed-tree cuttings, to meet management objectives favoring regeneration of a desired species and/or promote growth and avoid adverse environmental impacts. A complete description of these systems and the conditions under which they will be used can be found in BLM's SYU-15 Timber Management Environmental Assessment.

The proposed timber management program is based on extensive and intensive inventory data (Timber Production Capability Classification (TPCC) collected in 1974 and 1978. The TPCC partitioned all public land administered by BLM in SYU-15 into categories or land use classes based on the land's physical and biological capacity to produce timber shown in the inventory were areas which were capable of producing timber but were excluded from the timber base due to the timber stand's adverse location, fragility or reforestation condition. The former category (adverse location) specifically looked at, and excluded from logging, problem sites which, because of their physical isolation, made them difficult or impossible to manage on a sustained yield basis. No commercial forest lands in the Alturas Planning Area were excluded because of their physical isolation.

1-4 (continued)

BLM's current policy on economic set-asides excluded under the TPCC inventory is to restore these areas within the timber base and offer them for sale letting the market decide the present economic feasibility of harvesting (see W.O. Instruction Memorandum 83-303, Draft Public Domain Commercial Forest Set-Aside Policy, Encl. 1-5, Section VI.A.).

1-5 The Final Timber Management Environmental Assessment, Sustained Yield Unit 15 projects an allowable cut per decade for SYU-15. The entire Susanville District is allocated 19.0 MMBF per decade. Based upon a straight acreage percentage (30 percent of Susanville District's timber base is covered by the RMP/EIS) the projected allocated allowable cut is 5.70 million board feet per decade. Of this 5.70 MMBF, 4.70 MMBF (84 percent) is attributed to natural growth, While 1.0 MMBF (16 percent) is due to intensive management practices. To produce the volume during the first decade, approximately 340 acres (2.2 MMBF) would be commercially thinned.

A socioeconomic section dealing with the timber management program has been added. See pages 3-22 and 3-23 and Table 3-3 on page 3-25.

The 1,240 acres of plantations in MA 6 would be intensively managed utilizing one or more of the following - precommercial thinning, mechanical brush manipulation, prescribed fire and herbicides. The selected practice(s) would be determined during the site specific forest development project planning process.

The allowable cut computation (SIMIX model) simulated intensively managed forest properties using mixed harvest management systems and even-age, even-flow, production sustained-yield forestry concepts. This three-stage harvest considered: 1) initial cut; 2) intermediate cut; and 3) final harvest. An all-age selection or continuous-canopy condition was represented. Multiple-use considerations were incorporated. Under regulation, existing timber production base would be cut and converted to young stands. During the first decade (1975-1984) old growth and mature timber would be partially cut. Conifer species would be managed on 90-year rotations.

Selection cutting is the practice most commonly employed on SYU-15 forest lands. This system removes individual trees or groups of trees at intervals of 10 to 25 years. Natural regeneration is established almost continuously. The primary objective is maintenance of an uneven-age stand, with trees of different ages and sizes intermingled singly or in groups. This is achieved by removing overmature, defective and high-risk trees to improve stand condition and net growth; leaving healthy mature trees for seed trees; removing small trees of undesireable form; and improving opportunities for natural regeneration. Approximately 50 percent of the volume harvested would be selectively cut with the remainder commercially thinned. Clearcuts are not proposed.

1-5 (continued)

In the short-term (10-year period 1975-84), intensive management practices would increase timber productivity on commercial timber lands by replacing over- and understocked, poorly growing stands with young, well stocked stands. Approximately 13 million board feet per decade would be added to the allowable cut within the sustained yield unit (approximately 620 MBF in the Planning Area). At the end of the ninth decade the 10-year cut for the Planning Area would be raised to approximately 8.6 million board feet as a result of proposed management practices. In computing the level of timber harvest, all volumes and forest practices were projected for a 400-year period. This was done to assure that all lands could be productive at the proposed level for 400 years.

1-6 The FEIS has been expanded to include additional resource information to provide the reader with more background material for the decisions made in the plan. Analysis in the planning process was completed through an in-house step called the Analysis of the Management Situation. This document considered by MA the objectives and goals of the issues/resources identified on pages 1-5 to 1-7. These objectives were then arrayed by alternative with support actions that will be taken to achieve objectives.

1-7 The concept of a joint plan with the Modoc National Forest was initiated in the fall of 1980. The issues identified in this document were formulated by both agencies, keeping in mind common public interests and resource concerns. Different planning schedules and processes separated the joint plan a year later. However, both agencies have maintained close coordination to insure compatible resource objectives are achieved on public and forest lands.

Resources Building
1416 Ninth Street
95814

(916) 445-5656

Department of Conservation
Department of Fish and Game
Department of Forestry
Department of Boating and Waterways
Department of Parks and Recreation
Department of Water Resources

GEORGE DEUKMEJIAN
GOVERNOR OF
CALIFORNIA

THE RESOURCES AGENCY OF CALIFORNIA
SACRAMENTO, CALIFORNIA

Air Resources Board
California Coastal Commission
California Conservation Corps
Colorado River Board
Energy Resources Conservation
and Development Commission
Regional Water Quality
Control Boards
San Francisco Bay Conservation
and Development Commission
Solid Waste Management Board
State Coastal Conservancy
State Lands Commission
State Reclamation Board
State Water Resources Control
Board

#2

Mr. C. Rex Cleary
District Manager
Bureau of Land Management
Post Office Box 1090
Susanville, CA 96130

July 7, 1983

Dear Mr. Cleary:

The State has reviewed the draft Resource Management Plan and EIS, Alturas Resource Area, submitted through the Office of Planning and Research in accordance with OMB Circular A-95 and the National Environmental Policy Act of 1969. This review was coordinated with the Water Resources Control Board, Native American Heritage Commission, and Departments of Conservation, Fish and Game, Forestry, Parks and Recreation, and Water Resources.

Attached for your consideration in preparing the final report are comments received from the Department of Fish and Game. Questions regarding these comments should be directed to A.E. Naylor, Regional Manager, 601 Locust Street, Redding 96001.

The Department of Parks and Recreation comments that the project is subject to the provisions of Section 106 of the National Historic Preservation Act of 1966 as amended. Therefore, documentation should be submitted to the Department's Office of Historic Preservation, 1220 K Street, Sacramento 95814, as required under the Advisory Council on Historic Preservation's procedures, "Protection of Historic and Cultural Properties: Final Amendments (36 CFR 800). Compliance should be completed before a final document is submitted.

Sincerely,

GORDON F. SNOW, Ph.D
Assistant Secretary for Resources

Attachment

cc: Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

(SCH 83050903)

State of California — The Resources Agency

Memorandum

To : Honorable Gordon K. Van Vleck
Secretary for Resources
1416 Ninth Street
Sacramento, CA 95814

Attn: Projects Coordinator

Date : July 6, 1983

From : Department of Fish and Game

Subject: SCH 83050903 - Draft - Alturas Resource Area, Resource Management Plan and Environmental Impact Statement - Lassen and Modoc Counties

The Draft EIS examines five alternatives for resource management on 407,306 acres of public land in the Alturas Planning Area of Modoc and Lassen counties. The proposed alternative is for Balanced Management (Alternative 2), with specific exceptions in management areas six and 10. The Planning Unit includes two Wilderness Study Areas for which recommendations are made.

2-1 Our review of this document and the selected alternative indicates that the plan is too general in nature to allow us to evaluate impacts on wildlife.

2-2 For example, on page ii, Cumulative Summary, Range, BLM has the discretion of permitting over 30,000 AUMs of livestock grazing use above the present level of use (authorization of 48,666 AUMs plus restoration of some part of 32,070 AUMs). Present use is 50,464 AUMs. The document should describe when and where the discretionary use might occur and the anticipated effects on wildlife.

2-3 Another concern is that no mention is made of wildlife AUMs and/or no provisions are described for increasing wildlife AUMs by management area. Our pronghorn antelope management plan contains population goals by sub-herd. We feel that these sub-herd population goals should be provided for in this plan. Draft deer herd plans have been completed for some herds and others are being prepared for deer in this area. These drafts include deer population goal information which we would like to see considered in the plan.

2-4 The plan does not consider alternatives to improve the manageability of public lands other than disposal. The disposal of identified public lands will have serious impacts to the following wildlife values:

Critical deer winter range
Golden eagle nest territories
Antelope kidding grounds, migration routes, summer and winter range.

2-4 Cont.

Sage grouse strutting grounds, summer and winter range
Prairie falcons
California bighorn sheep winter range
Water associated bird habitat

In some instances the scattered nature of the lands provides valuable habitats which coincidentally support wildlife with adjacent lands. In addition, the proposed disposals have the potential to impact hunter access as well as restrict other recreational uses.

2-5

The plan does not provide the necessary information to make assessments of extended grazing seasons vegetation treatments. The plan should provide proposed dates, location of treatments, existing vegetation structure and target vegetation structure. Statements such as "enhance deer/antelope winter range"

2-6

and "improve browse on deer winter range" are relative and mean very little and cannot be assessed without specifics being identified.

2-7

The only silviculture practice identified is "Intensive Timber Management (See Glossary)." This practice could be detrimental to wildlife, principally deer and nongame species depending on location and method. The plan should identify other silvicultural practices.

2-8

The plan does not provide the specifics needed to assess juniper management practices and oak and mahongany cutting. Juniper management could either improve or adversely impact wildlife, depending upon location and practice. Oak and mahogany are both high value wildlife plants. Mahogany stands have become decadent and reproduction is not keeping up with mortality. The oak resource has not been quantified in the plan.

2-9

The major issue, wetland riparian, has also been excluded from the alternatives and impacts but has been partially covered under other issues. This issue represents a declining habitat type which supports a wider range of wildlife species than any other type within the resource area. Conflicts exist with other resource values. Livestock could have a devastating effect on meadows and riparian vegetation if not properly controlled. Riparian habitats are also covered by state and national policy.

2-10

While the plan does make provisions for protecting sage grouse strutting grounds, no provisions are made for identifying or protecting sage grouse nesting areas and brood rearing habitats.

The major issues are fairly specific as to needs. Goals, however, are generally not responsive to the specific needs of the major issues and are too permissive in arbitrary management decisions.

Specific recommendations, comments and additions to the plan are as follows:

Very little emphasis has been placed on nongame wildlife and habitats in Chapter 3, Affected Environments, or impacts in Chapter 4, Environmental Consequences.

2-11 Recreation/OHV and Threatened and Endangered Wildlife Issues have not been considered in the alternatives (Table 2-1 page 2-2, and Impacts, Table 4-1 page 42). These major issues were dropped by BLM as not being significant (page 2-1, first paragraph). Recreation is identified as having a positive economic impact in the Social-Economic Conditions section of Chapter 3, Affected Environments, page 3-20. Threatened and endangered wildlife have both national and state policy direction. Conflicts with other resources have the potential to adversely impact both of these major issues.

2-12 Table 2-1, Management Area 1, Alternatives, page 2-4, Alternative 11, the proposed alternative states "Maintain roadway on the Likely Tables." The improvement of public access in this area can cause significant impacts to deer, antelope and sage grouse. More information should be provided on quality of roads for this area.

2-13 This plan does not establish habitat goals for Management Indicator Species. Habitat goals and monitoring systems should be made part of the plan. The monitoring systems for wildlife and habitats under Fish and Wildlife (Chapter 2, Alternatives, Monitoring Program, page 2-45) do not adequately assess the broad range of wildlife species which use these lands. Refer to "Fish and Wildlife Capability Models and Special Habitat Criteria for the Northeast Zone National Forest," Shimamoto, Kahre, Daniel Airola (1981) for Management Indicator Species and habitats.

2-14 Page 1-4, 2. Land Use Planning - Resource conflicts are not identified or responded to. Potential conflicts exist between the Wildlife and Threatened and Endangered Wildlife Issues with other identified Major Issues (such as Range, Timber, Recreation/OHV, Fuelwood, Minerals/Energy and Lands). Potential conflicts exist with two issues (page i) which BLM dropped from the plan (i.e., Fire Management and Transportation/Communication).

Page 1-4, 3. Implementation, second sentence - Environmental assessments are essentially in-house documents and not necessarily subject to outside review. Therefore, to avoid subjective decisions, all Resource Goals should not be general or relative in nature, but should be quantifiable and as specific as possible. The plan should identify what additional information is needed and establish the means for obtaining the data and incorporating them in the plan.

The Social-Economic Conditions (Chapter 3, page 3-20) and Impacts (Chapter 4, pages 4-35 and 4-36) do not adequately address Recreation, Fish and Wildlife, Fuelwood, Timber, Minerals/Energy and Lands Major Issues. These sections are primarily devoted to the Social-Economic conditions of livestock and agriculture.

2-15 Page 3-7, Mountain Shrubs - Add snowbrush (Ceanothus velutinus) to the plants important to wildlife.

Page 3-8 and 3-38, Pronghorn Antelope - The southern portion of Unit X1 is important antelope range. This information should be included.

2-16 Page 3-33, Fish and Wildlife - The waterfowl management areas mentioned were part of the former Madeline Waterfowl Area. This area was sold over 20 years ago and developments have not been maintained. This paragraph should be omitted.

2-17 Page 4-34 - Tables for Unit 11 do not include a section on fish and wildlife. This unit contains important winter deer range, pronghorn antelope range, and antelope kidding grounds. Some discussion of impacts on these species should be included.

2-18 The disposal of large acreages (up to 30,000 acres) of public land is not in keeping with the stated objective of the plan (page 1-1, first paragraph). The plan does not provide a substantiating need for the action. Chapter 3, Affected Environments, makes no attempt to evaluate these lands. The section of Chapter 3 on Social and Economic Conditions (page 3-20) makes no evaluation of these lands. The Cumulative Summary of Impacts Table (page x) states there would be "Insignificant increase in land available for homesites/agriculture development." This same table on page viii and page vii identifies potential significant impacts of the proposal to threatened and endangered plant species and to deer winter range. Table 4-2 (page 4-35) also identifies these lands as having an insignificant increase in agriculture production and residential/recreational home development. The Short-Term Use versus Long-Term Productivity section (page 4-40, paragraph 5) identifies significant loss of big game winter range from the disposal of these lands. The Irreversible and Irretrievable Commitment of Resources section (page 4-41, paragraph 6) identifies a "loss of administrative control and public use for all resource values except mineral values on those parcels."

Chapter 4, Environmental Consequence, Mitigation Measures (pages 4-37 and 4-38) provides for mitigation for the significant wildlife impacts, identified in the plan, resulting from the disposal of public lands.

2-19 The Unavoidable Adverse Impacts section (Chapter 4, Environmental Consequences, pages 4-38 and 4-39) does not address the disposal of public lands.

2-20 The Table 4-2, Socioeconomic Impacts Area Wide, on page 4-35 is inadequate as it does not discuss the impacts of issues other than Range and Lands.

Mitigation Measures (page 4-37): The adequacy of this section cannot be assessed as the Plan has not identified and discussed potential conflicts or provided relevant information germane to the comments presented.

If you have any questions regarding our comments, please contact Mr. A. E. Naylor, Regional Manager, Region 1, 601 Locust Street, Redding, CA 96001. His telephone number is (916) 246-6511.

Director

Response to Letter No. 2

2-1 The RMP/EIS is a general plan for allocation of resources within the Planning Area and as such does not deal with each resource on a site-specific basis. Site-specific planning and analysis would occur at the activity plan level.

2-2 The restoration or increase in AUMs over present levels would occur through increase in available forage from vegetative treatments such as prescribed burning, spraying, juniper thinning, and improved distribution from new reservoir development, as monitoring reveals improving trend on available forage. Projects would be implemented to improve range trend and available forage with wildlife needs considered prior to the increased allocation. See discussion of the livestock management program on page 2-52.

2-3 A range production inventory was not conducted as a baseline study for this plan. Wildlife and livestock AUMs were therefore not allocated. The baseline study was a range condition study with follow-up monitoring to determine range trend. The Pronghorn Antelope Management Plan referred to was available during this planning process; however, deer herd population goals were not available from the Department of Fish and Game. Since only partial information was available, it was decided to omit population goals. Based on this comment, the Department of Fish and Game was recontacted to obtain an update on their deer herd management plans affecting this area.

2-4 During the process of identifying lands for disposal, all known wildlife resources for each parcel were identified and given consideration. Numerous parcels, particularly in MAs 3, 4, 5, and 7, would be retained for their wildlife resources including sage grouse strutting grounds, critical deer winter range, antelope migration routes, etc. Lands identified for disposal in MA 9, for example, are being considered for exchange for lands in critical deer winter range in MA 10. Additional acquisition is identified in MA 8. The final document dropped approximately 2,500 acres of identified critical wildlife resources. Losses to wildlife resources as a result of disposal are acknowledged in Chapter 4. See disposal criteria in Appendix B-1.

2-5 See response number 1 to this comment letter and the expanded descriptions of range management practices in Chapters 2 and 3.

2-6 The terms referred to indicate the management emphasis for wildlife in the MA. On the same table, under "Support Needs", these goals are further highlighted. For example, MA 2, page 2-6, Alternative II: "Improve browse on deer winter range", corresponds to "Thin 2,960 acres of juniper." In crucial deer winter range, the wildlife staff

2-6 (continued)

has identified browse areas (particularly bitterbrush) where juniper encroachment seems to be causing high mortality and decadence. These areas are mapped and a fuelwood reduction plan for these sites would be implemented. "Improve meadow and spring habitats" relates to "Fence 17 springs and meadows."

Likewise, these areas have been identified and mapped during inventory, and an allocation made for improving these sites. The problem areas identified for formulating these objectives and support actions are described in Chapter 3, Affected Environment.

2-7 See Final Timber Management Environmental Assessment - Sustained Yield Unit 15 and response 1-4. This document describes the cutting practices that would be employed on public lands which would consist primarily of selective cutting - individual tree selection with the primary objective of maintaining an uneven-age stand. Some areas may be essentially clear cut as a result of fire, insect, and disease salvage. The goal of maintaining an uneven-age stand was considered optimal for wildlife in most situations. Protection of raptors would be considered on a site-specific basis. For further information on timber management, see the Final Timber Management Environmental Assessment for Sustained Yield Unit 15, pages 2-9 and 2-10 of that document.

2-8 See response number 6 to this comment letter.

The value of oak and mahogany for both food and cover for wildlife is recognized and the harvest of these species would be very limited. Oak harvest would be permitted and closely regulated in burn areas or fuel reduction areas where prescribed burning or other wood product sales are occurring. Mahogany harvest would be extremely limited and largely experimental in decadent stands to attempt to promote regrowth. Acreage figures for oak have not been obtained but the species is limited to MAs 5, 6, 7, and 8.

Juniper harvest would generally be allowed throughout the Planning Area (with exception of MAs 1 and 8) but additionally directed to specific areas for other management purposes such as wildlife and range. The statements in the alternatives saying "Permit harvest..." are provided to allow cutting where desireable subject to constraints developed at activity level planning.

2-9 Livestock would be excluded from a total of 20 miles of riparian habitat out of approximately 40 miles under BLM management where a manageable segment of riparian habitat occurs (over 0.5 miles). The remainder is not being significantly impacted. Additional fencing is being planned in meadow habitats at 70 sites. All of these actions appear in the alternative tables (Table 2-1). Also see the Summary of Alternatives Table S-1.

2-10 Current literature suggests that up to 90 percent of sage grouse nesting and brood rearing occurs within a two mile radius of strutting grounds. Such a radius would encompass approximately 8,000 acres per strutting ground. Given this radius, over 100,000 acres in MA 1 alone would be subject to such restriction. The plan does not identify a protective radius around strutting grounds for nesting and brood rearing. Individual site needs for these habitats would be considered in environmental assessments as part of the burn or other activity plan prior to treatment. Protective fencing around meadows should enhance this habitat.

2-11 Recreation/OHV are not carried through the plan as issues but are addressed under other issues such as watershed and fish and wildlife, where conflicts/resource damage exist or are anticipated. Though the economics of recreation are significant during deer season, the overall effects of this brief use on resources area-wide are not significant. Threatened and endangered plants and wildlife are both carried through the alternatives within each MA where they occur. Mitigation measures are incorporated as part of the standard operating procedures on page 2-52 which would protect them in accordance with the Endangered Species Act.

2-12 Two-wheel-drive access onto the Likely Tables already exists without any major impacts to wildlife populations. Antelope and deer, for example, are suffering no declines as a result of this access. The maintenance of lengths of roadway on the Likely Tables would not significantly improve access into the area. These improvements are designed to reduce soil loss in specific locations.

2-13 The BLM manual does not recognize the management indicator species concept. Monitoring systems are developed in response to issues.

2-14 Potential wildlife impacts with respect to fire management and transportation/communication issues would be insignificant. Consistent with CEQ guidelines, major emphasis was provided on those issues which were most significant. Specific impacts regarding fire management and vegetative treatments associated with range activities are discussed with respect to comments in this letter and in the FEIS. Measures to mitigate the adverse impacts to prescribed burning are included in Chapter 4.

2-15 Snowbrush has been added to the text under Mountain shrubs, page 3-9.

2-16 The comment does apply to the Madeline Plains Waterfowl Management Area (T.36N., R.12E., Section 1); however, similar developments referred to on page 3-47 are on public lands (T.37N., R.13E., Sections 29, 30, 32).

2-17 Current management in MA 11 is not adversely impacting wildlife. No actions are proposed on these parcels. Disposal of these areas as described in the draft EIS has been dropped from the final EIS as discussed in the Preferred Alternative, page 2-45.

2-18 The purpose and need for the EIS has been revised to clearly explain the objectives of this document. One of the objectives is "to increase the overall efficiency and effectiveness of public land management by identifying public lands for potential disposal."

The Preferred Alternative of the FEIS has deleted 4,760 acres from disposal designation within MA 1 through MA 10. An additional 4,600 acres adjacent the east side of the Warner Mountains have been retained in MA 11. (See page 2-45, Preferred Alternative.)

Land disposal criteria has been added to Appendix B-1. The criteria outlines the retention and disposal considerations used to evaluate each parcel, in addition to the resource criteria considered to meet the objectives of each alternative. Through this process, the overall objective of improving management efficiency would be achieved throughout the Planning Area.

Environmental consequences have been revised substantially to reflect the reduction of land disposal within Summary Tables S-1 and S-2 and Chapter 4. These tables also describe the effects of land disposal on wildlife, range, cultural resources, etc.

2-19 The adverse impacts as a result of the disposal of public lands have been greatly reduced within the Preferred Alternative due to the deletion of approximately 9,300 acres of public lands as stated above. Adverse impacts that would still occur have been addressed under the Summary of Cumulative Impacts, Table S-2, page vii.

2-20 Table 4-1, page 4-55, has been revised. Additional socioeconomic impacts have been addressed in relation to range, timber, and land disposal.

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July 15, 1983

C. Rex Cleary
District Manager
Bureau of Land Management
P.O. Box 1090
Susanville, CA 96130

Dear Rex:

Enclosed are NRDC's comments on the Alturas draft RMP/EIS. We believe the document suffers from a number of serious deficiencies. Some of these may have resulted from a lack of resources or other constraints beyond your control. Even so, because this is the first RMP to be prepared in California, it is particularly important to conduct an adequate environmental analysis and to develop a meaningful land use plan that complies with legal requirements. The Alturas draft RMP/EIS fails to do so and should therefore be revised, supplemented and circulated for additional public comment.

I would like to thank you and your staff, particularly Rich Drehobl, for your help and for allowing us several additional days to submit our comments. My visit to Alturas was also very helpful in preparing these comments. I hope these comments are useful to you and will improve the planning process in the Alturas area.

Sincerely,

David B. Edelson

DBE:klw
Enclosure

cc: Richard Drehobl (with attachment)

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July 15, 1983

C. Rex Cleary
District Manager
Bureau of Land Management
P.O. Box 1090
Susanville, CA 96130

Re: Alturas Draft Resource Management Plan
Environmental Impact Statement

Dear Rex:

I have reviewed the Alturas draft RMP/EIS carefully and submit these comments on behalf of the Natural Resources Defense Council, Inc.

Overall, the document is a major disappointment. Although it contains some specific proposals that address existing problems of range and wildlife management, it contains very little information and virtually no constraints or guidelines with respect to timber and minerals management or land disposal. In this respect, the document resembles a grazing EIS that has been expanded to include headings for timber, minerals, wilderness, etc. However, the draft contains nowhere near the detail and information with respect to those resources and activities as it does with respect to range management. Thus, it fails to provide necessary inventory information or to establish meaningful goals, guidelines, and constraints for future management of activities other than livestock grazing, as required by the Federal Land Policy and Management Act (FLPMA) and the planning regulations.

The document also fails to comply with the full environmental disclosure requirements of the National Environmental Policy Act (NEPA). The description of wildlife

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habitat, wilderness study areas, and other resources lacks sufficient detail to identify specific resource and management problems or assess proposed solutions to those problems. The environmental impact analysis of all proposed actions is extremely conclusory and fails to substantiate predicted impacts or explain how the conclusions were derived. The alternatives presented often fail to include a broad range of choices. Particularly because this is the first RMP/EIS to be prepared in California, we strongly urge you to prepare and circulate for public review a revised or supplemental draft that remedies these and other deficiencies outlined below.

I. Range Management

3-1 The range management proposals and alternatives fail to comply with the basic requirements of the National Environmental Policy Act (NEPA), as set forth in the court's opinion in NRDC v. Morton, 388 F. Supp. 829 (D.D.C. 1974), applicable regulations, and elsewhere. The EIS lacks necessary grazing capacity and other information, adequate environment impact analysis, and sufficiently detailed proposals. Moreover, the preferred alternative does not satisfy the Bureau's substantive obligation, as set forth in the Taylor Grazing Act, FLPMA, and the Public Rangelands Improvement Act (PRIA) to protect and improve resource conditions.

3-2 The document's failure to set forth estimates of existing and potential grazing capacity of each allotment is a critical flaw. The Bureau is required by the Taylor Grazing Act, FLPMA, PRIA, and its own regulations to ensure that authorized grazing use does not exceed an area's grazing capacity. See, e.g., 43 C.F.R. §§ 4100.0-2, 4110.3-2(b), 4120.2-1(a) (1982). Accordingly, the agency must analyze grazing capacity in EISs in order to allow both the public and decision-makers to determine how much grazing, if any, should be allowed in a given area, and how grazing should be managed. Without this information, the Bureau will be unable to make land use planning decisions that

3-2 Cont.

will prevent overgrazing and resulting resource deterioration. Similarly, without specific estimates of potential grazing capacity the agency cannot properly establish in the land use plan constraints and limitations on future grazing use, as required by its regulations. See 43 C.F.R. § 1601.0-5(k)(2), (4) (1983).

3-3

The EIS also lacks comprehensive soils and vegetation data. The document states that "some sites exhibit accelerated [soil] erosion" (p. 3-13) but fails to identify any such sites or describe the data upon which this conclusion was based, even though the data are apparently available. There is no description at all of soil and watershed conditions in the discussion of most of the management areas. (pp. 3-23 to 3-28, 3-30 to 3-38.) In addition, the EIS provides ecological range condition data for a number of allotments (Table 3-1) but fails to provide such data for many other allotments.[1/] This information is necessary in order to determine existing resource problems and assess proposed solutions to those problems. Thus, the EIS fails to describe adequately the affected environment and to provide information needed to support proposed management actions and substantiate predicted impacts, as required by NEPA.

3-4

The lack of sufficient range condition and grazing capacity data makes it impossible for readers to assess the M-I-C categorization decisions set forth in the document. Such information is necessary to determine whether an allotment satisfies particular categorization criteria, including whether present range condition and present management are "satisfactory"

[1/] The Bureau also does not identify when such data were obtained or describe the techniques used to acquire the data. Nor does the EIS describe in any detail the various types of climax plant communities used to assess existing conditions in particular areas. See Appendix A.

3-4 Cont.

or "unsatisfactory," whether areas have low, moderate, or high production potential, and whether they are producing near that potential. (pp. 2-42, 2-43.) The document also fails to explain how the criteria were applied to each allotment in order to reach the categorization decisions; moreover, the decisions themselves were apparently reached without prior publication of proposed decisions and opportunity for public comment, as required by the Bureau's "Final Grazing Management Policy," pp. 1-11 to 1-15 (Instruction Memorandum No. 82-292, March 5, 1982).

3-5

In part due to the lack of grazing capacity and other essential information, the discussion of environmental consequences in Table 4-1 is extremely conclusory and unhelpful.[2/] The Bureau's exclusive reliance on the table format also precludes a comprehensive, cogent discussion of how these predicted impacts were derived. While tables are useful in avoiding unnecessary repetition and reducing space and expense, they must be supplemented by more detailed explanations in order to satisfy NEPA's requirement that EISs contain evidence that the agency has conducted the necessary environmental analyses. See 40 C.F.R. §§ 1502.1, 1502.24 (1982); Department of the Interior, Departmental Manual on NEPA, § 4.14 (45 Fed. Reg. 27546 (April 23, 1980)). In particular, the EIS should explain which impacts are attributable to which particular proposed management actions.

3-6

The RMP/EIS also lacks sufficiently detailed range management proposals and a reasonable range of alternative management practices. Proposals considered in EISs must include,

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[2/] In addition, some conclusions seem unlikely. It is doubtful, for example, that "increased livestock forage ... would improve overall ecological range condition." (p. 4-28.) Others are clearly wrong, such as the prediction of "gradual improvement in ecological range condition ... due to no livestock grazing" (p. 4-33) when the proposal would "authorize 168 cattle AUMs" (p. 2-36).

for each allotment, numbers of livestock, seasons of use, utilization levels, and all other necessary terms and conditions of grazing, including grazing systems. See 43 C.F.R. §§ 4120.2, 4120.2-1(a), 4120.2-3(a) (1982). Moreover, EISs must analyze a reasonable range of alternative grazing levels and a "full range of management practices." Final Grazing Management Policy, p. 1-18.

3-6 Cont.

The EIS falls short of these requirements. The document analyzes a range of alternative grazing use levels for eleven management areas, but fails to specify numbers of livestock for each of the allotments within those areas. Moreover, the EIS lacks an adequate range of management practices. The only changes in seasons-of-use that are considered would lengthen the use period by thirty or sixty days on certain allotments; no reductions in existing seasons-of-use are assessed, and no explanation is offered to justify proposed increases. Similarly, proposed utilization levels are described simply as "light," "moderate," or "heavy," but these terms are never defined and their application to specific allotments is never explained or justified.

3-7

Further, existing grazing systems are not described and no specific grazing systems are proposed or even considered. (p. 2-42.) We do not object to "consultation with graziers and other interested groups" before formulating or adopting specific grazing systems, but we see no reason to delay such consultation until after the EIS has been completed or to omit proposed grazing systems from the EIS. Indeed, analyzing specific alternative grazing systems in the EIS would provide valuable information to enable the agency, the public, and graziers to develop the optimal systems.

3-8

Perhaps the most egregious example of the EIS's failure to include specific range management proposals and alternatives

relates to vegetation treatments. Virtually no information is provided with respect to the type or types of treatments that will be allowed, the specific areas that will be treated, or the need for such treatments. Instead the document baldly states that "vegetative treatments" will be applied to a certain number of acres of land. (E.g., pp. 2-16, 2-22, 2-31.)

Given that herbicide application apparently is one of the treatments under consideration (p. 4-38), this lack of specificity is a fundamental defect. Herbicide spraying may have a significant adverse effect on humans and the environment and must be thoroughly analyzed in the EIS. The potential risks must be assessed and a worst case analysis prepared and circulated for public comment when risks are uncertain. See, e.g., Save Our Ecosystems v. Watt, Civ. No. 83-6090-E (D. Ore. May 6, 1983); Merrell v. Block, Civ. No. 81-6138-E (D. Ore. April 19, 1983); Southern Oregon Citizens Against Toxic Sprays v. Watt, Civ. No. 79-1098FR (D. Ore. Sept. 9, 1982). The EIS should consider utilizing other techniques of vegetation manipulation, such as burning, as well as the possibility of "no action," or foregoing all such techniques. Without such analysis, neither the Bureau nor the public can determine how much, if any, herbicide spraying should be allowed. Moreover, because the RMP is designed to provide comprehensive guidance for all future management actions, including herbicide spraying, if any, this analysis should be included in the draft RMP/EIS, not in some later document. See, e.g., 40 C.F.R. § 1502.22 (1982).

3-8 Cont.

The preferred range management plan fails to address or resolve certain acknowledged resource problems as expeditiously as possible, and should therefore be modified. The Bureau is required by FLPMA and PRIA to "take any action necessary to prevent unnecessary or undue degradation of the lands" and to "improve the conditions of the public rangelands so that they

3-9

become as productive as feasible." 43 U.S.C. §§ 1732(b), 1901(b)(2), 1903(b). In spite of this mandate, under the preferred alternative, ecological range condition "would remain static in fair and poor condition" in management area 5 (p. 4-15); no specific changes are proposed in area 7 even though the lands "would benefit greatly from more intensive grazing systems and practices" (p. 3-28); "[e]cological range condition would decline in some treated areas that are managed primarily for livestock forage" (p. vi); and continued degradation of over 5000 acres of riparian meadows in area 7 would be allowed (p. 2-23). Even the adjustments that have been identified as necessary to remedy degraded resources and improve unsatisfactory conditions would be delayed for at least five years. (pp. 1-4, 2-43.) We urge the BLM to address and resolve all identified resource problems and to implement all necessary management actions as soon as possible, as required by FLPMA and PRIA.

3-10

3-11

We have the following additional concerns and questions. In management area 11, the Bureau proposes that livestock operators have the lead in determining grazing management. (p. 2-36.) This proposal is never explained, justified, or analyzed. How much flexibility will the ranchers be given, and how much oversight will the Bureau exercise? What regulatory authority does the Bureau have to initiate such a program? Finally, why will the Bureau authorize significantly more AUMs under the "maximized protection" alternative than under the "balanced" alternative in two of the management areas? (pp. 2-10, 2-36.)

3-12

3-13

II. Fish and Wildlife

The Alturas area provides important habitat for numerous fish and wildlife species, including mule deer and antelope, and should therefore be managed to protect and improve such habitat. We commend the agency for including a number of specific

proposals that are designed to achieve this goal. On the other hand, the descriptions of wildlife habitat conditions are extremely vague (e.g., pp. 3-25, 3-26) and the threats posed to such areas are not described in any detail. As a result, the predicted environmental consequences of implementing these proposals consist of unsubstantiated conclusions, and neither the public nor the agency can assess or compare the various alternatives, in contravention of NEPA's purposes.

3-14

We support the Bureau's goal to "provide sufficient habitat for native fish and wildlife species and give emphasis to maintaining or improving certain key habitats." (p. 1-5.) However, the document fails to explain how and to what extent the specific proposed actions for fish and wildlife, taken together, will achieve this goal. Although the habitat maps are useful and detailed, they do not identify the "key" habitats; nor does the EIS explain which habitat areas are particularly important or what activities may threaten such areas. Thus, it is impossible to assess which of the proposed actions and alternatives, if any, will adequately resolve existing and potential problems.

3-15

The discussion of environmental consequences to wildlife suffers from the same flaws outlined above with respect to range management. In short, the tables provide bare conclusions with no explanation of how the conclusions were derived and no description of how terms like "moderate improvement" or "significant decline" of wildlife habitat translate into actual, on-the-ground changes. To remedy these deficiencies, the Bureau should explain the particular fish and wildlife objectives that it seeks to achieve for each management area; describe the problems and resource constraints that may impede reaching these goals; and analyze in detail how and to what extent various proposals and alternatives would resolve these problems and meet the established objectives.

3-16

III. Wilderness and ACECs

The cursory discussion of wilderness study areas (WSAs) and the complete lack of information about potential Areas of Critical Environmental Concern (ACECs) in the draft document violate the planning requirements of FLPMA and the full disclosure requirements of NEPA. The EIS contains only the sketchiest information about the two WSAs, Pit River and Tule Mountain, and provides a scant one sentence explanation for concluding that 4000 acres of the East Warners are "unsuitable" for wilderness. The bare descriptions of these areas and the brief, conclusory outline of the environmental consequences of designating the areas as non-wilderness fall far short of the basic requirements of NEPA. Moreover, the Bureau's decision to address ACECs "outside of the planning process" (p. i) violates FLPMA and the planning regulations, and the lack of any detailed discussion of the one potential ACEC mentioned, Sheep Valley, indicates that the area is not being seriously considered for such designation.

3-17

The single paragraph descriptions of the WSAs and the one page "summary tables" fail to provide the detailed information necessary for the reader to assess the proposed wilderness recommendations. The descriptions consist of broad generalizations like "deep canyon topography" together with a listing of types of vegetation and topography that purport to inform the reader of the potential wilderness values and natural features of many thousands of acres of wilderness. The summary tables consist of bare conclusions such as "no uncommon natural features," "no special ecological or geographical features" (p. 3-35), or, in the case of the recommended area, terms like "unusual scenic quality" and "abundance and diversity of native fish" (p. 3-32). Completely lacking is any detailed description of the specific natural features, landmarks, geology, flora and

fauna, mammals, reptiles, fish, etc. that exist in the WSAs, much less any meaningful analysis of how these specific resources might merit wilderness (or ACEC) designation or how they would be adversely affected by a non-wilderness recommendation. Thus, the discussion of wilderness in the EIS falls far short of satisfying NEPA's full disclosure requirements, as set forth in California v. Bergland, 483 F. Supp. 465, 484-87 (E.D. Cal. 1980), aff'd in relevant part sub nom. California v. Block, 690 F.2d 753 (9th Cir. 1982).

3-17 Cont.

The discussion of Tule Mountain, the area recommended for non-wilderness, is particularly disturbing. The EIS simply asserts, with no supporting descriptions, explanations, or comparisons, that the area has "no special ecological or geological features" and offers no "significant" multiple resource benefits. (p. 3-35.) The document states that similar land form types "are represented in greater quantity and quality elsewhere in the region" (id.) without describing or even mentioning such areas or explaining the criteria used to compare "quality" of the areas.

3-18

Numerous endangered plants exist in the management area (p. 3-37) but it is not clear from the discussion whether they exist in the WSA, and, if so, what the consequences to such plants of non-wilderness designation will be.

3-19

Given the absence of any detailed descriptions of the resources and recreational opportunities in the two WSAs -- and the lack of any information about the wilderness potential of the East Warners -- and the brief, conclusory section on the environmental consequences to these areas of implementing the proposed action or any of the alternatives, it is impossible for a reader to assess the proposed action or to verify that environmental impacts have been thoroughly considered. For example, the document never explains why the 5,775 acres of the Pit River WSA recommended as non-wilderness are "extremely

difficult to manage" (p. 2-39) and never discusses possible ways for overcoming such management obstacles. Nor does it include

3-19 Cont.

alternatives other than "all wilderness" that would provide any protection to any portion of the WSAs other than the 5800 acres of Pit River recommended as suitable for wilderness.

The lack of detailed description or analysis, and the failure to consider additional wilderness alternatives, suggests that a final decision on wilderness proposals has already been made. If so, public comment on the proposal will not only be

3-20

difficult, but also meaningless. We urge the Bureau to revise and expand the WSA discussion significantly in order to ensure that specific environmental factors are considered in the decision and that the public can participate meaningfully in the decision, as required by NEPA.

The document's treatment of ACECs is also inadequate. FLPMA requires the BLM to "give priority to the designation and protection of" ACECs in the "development and revision of land use plans." 43 U.S.C. § 1712(c)(3). The planning regulations

3-21

require the agency to identify and consider "potential" ACECs in the RMP process. 43 C.F.R. §§ 1610.7-2, 1601.05(k)(1) (1983). Thus, the Bureau's decision to drop ACECs from the RMP process, and to address ACECs, if at all, "outside of the planning process" (p. i), is not only unsupported but also contrary to clear legal requirements.

The RMP/EIS does refer several times to one potential ACEC, Sheep Valley. (E.g., pp. 2-24, 4-19). However, the area is not

3-22

even mentioned, let alone described, in the section on "affected environment" (pp. 3-28 to 3-29), and the resource or other values that might merit ACEC designation are never explained. Given this complete lack of information, it is impossible to assess the need or desirability of designating Sheep Valley as an ACEC, and it appears clear that the agency is not seriously contemplating

such a decision.

We urge the agency to consider potential ACECs in the RMP/EIS. In addition to expanding the discussion of Sheep Valley, the Bureau should analyze the possibility of designating the WSAs and the East Warners as ACECs as an intermediate management strategy between wilderness designation and no protection.

3-22 Cont.

IV. Timber and Minerals

The RMP/EIS provides very little information about the nature, scope, or extent of existing or proposed timber and mineral activities. For this reason, it is very difficult to comment on the timber and mineral proposals in the EIS. However, it is clear that the Bureau's failure to propose any guidelines or constraints on future timber and mining activities violates the basic planning requirements of FLPMA, and its failure to describe these activities or discuss in detail their impacts violates NEPA.

3-23

The document refers to mineral exploration and development at Hayden Hill (pp. 2-32, 3-20) but never describes existing and potential activities (pp. 3-34 to 3-36) or explains the environmental impacts of such activities (p. 4-32). Instead, the EIS simply states that "present management" will continue with "no significant impacts." Such bald assertions are obviously inadequate to comply with NEPA. Similarly, cinder pits and flat rock sales are mentioned (p. 2-25) but never described, explained, or analyzed in the other sections of the EIS, as required by NEPA.

3-24

3-25

The document also makes no attempt to propose any guidelines or constraints on future mineral activities, in spite of the acknowledged inadequacy of past land use plans for this

3-26

purpose.[3/] The plan lacks any "levels of production or use," "resource condition goals and objectives," or "program constraints and general management practices" with respect to mining activities, and thus totally fails to satisfy FLPMA's basic planning requirements. See 43 C.F.R. § 1601.0-5(k)(2)-(4) (1983). In effect, existing mineral activities, as well as potential oil and gas leases (p. 3-20), are omitted entirely from the RMP.[4/]

3-26 Cont.

The provisions with respect to timber activities are little better. Existing management is never described except as "intensive management," and such practices are never explained or analyzed, either generally or on a site-specific basis. Environmental consequences are stated in conclusory terms like "increase in growth and vigor" without any analysis of why such results might occur if the proposals are implemented. The only alternatives relate to numbers of acres to be harvested, and some areas lack any alternatives. (E.g., pp. 2-8, 2-18, 2-24.) Nor do the proposals establish any constraints or guidelines on future timbering activities -- except for numbers of acres -- as required by FLPMA.

3-27

In short, the document's provisions with respect to minerals and timber are fundamentally inadequate. As written, the document fails to provide any information or impose any meaningful constraints on minerals or timber activities and is therefore useless for assessing or guiding these activities. We

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[3/] See General Accounting Office, Minerals Management at the Department of the Interior Needs Coordination and Organization, pp. 56-57 (1981).

[4/] The sole exception is one proposal to "exclude geothermal development" from important habitat areas. (p. 2-33.) Although this proposal seems desirable, it is never explained or analyzed as required by NEPA.

urge the Bureau to make a serious effort to comply with its legal obligations by drafting new sections covering these activities.

V. Land Disposal

We commend the Bureau for making land sale decisions through the land use planning process, as required by FLPMA. However, we are concerned about the large amount of land being considered for disposal. Moreover, the document fails to identify the particular criteria that will be used in making land sale decisions, to explain how such criteria apply to individual allotments, or to analyze thoroughly the environmental consequences of land sales. The EIS must therefore be revised in order to comply with NEPA.

We understand that state, district, and area managers have been pressured by the agency's Washington staff to dispose of certain amounts of public land. How much land has been slated for disposal in the Alturas area in the most recent annual work plan? In our view, generating the relatively minor revenues that will result from such sales is only justified with respect to isolated parcels lacking any significant resource, wildlife, recreational, or other public values.

3-28

The only proposed guidance for land disposal contained in the RMP is to "improve manageability of small isolated tracts of public lands." Under the "maximized protection" alternative, the Bureau would also give "full consideration to natural resource values." However, no definition of "manageability" and no examples of applicable "natural resource values" are provided. Further, the particular allotments slated for disposal are never analyzed with respect to their manageability or natural resource values. In effect, the Bureau retains virtually unfettered discretion to make land disposal decisions even though the RMP is designed to guide such decisions. Nor does the document provide adequate environmental analysis of the proposed decisions.

Additional descriptions of resources, analysis of manageability problems, and discussion of environmental impacts is clearly necessary before land sales can be made.

We are particularly concerned about the effects of land disposals on wildlife. According to the EIS, there are "potential large-scale habitat losses on deer winter range where development occurs on disposed parcels." (p. vii.) The EIS fails to justify such severe adverse impacts, however. In fact, nowhere are the benefits of disposing of such important habitat areas described. The EIS also fails to analyze the effects of the land disposals on nearby retained lands. See 43 C.F.R. § 1601.0-8 (1983). We urge the Bureau to consider these issues thoroughly, as required by NEPA, prior to making land sale decisions.

3-28 Cont.

VI. Conclusion

The Alturas draft RMP/EIS reflects a substantial amount of time and effort. The results have not been insignificant: the draft contains a number of specific proposals, particularly with respect to range and wildlife management, and condenses much information into a relatively small space. At the same time, however, the draft suffers from a number of serious deficiencies, as outlined above. These shortcomings are significant and widespread enough to require the Bureau to revise and supplement the draft extensively and circulate it again for public comment. See 40 C.F.R. § 1502.9(a) (1982).

Thank you for considering these comments. Please contact me if you have any questions.

Sincerely,

David B. Edelson

David B. Edelson

Response to Letter No. 3

3-1 Goals of BLM according to Final Grazing Management Policy (I.M.-82-292) for protecting and improving resource conditions are to:

> "Improve the rangeland resources by making and implementing equitable and supportable decisions about land use, resource management and grazing authorizations...", and "Initiate cost effective rangeland improvements that will help improve the condition of the lands for livestock grazing, wildlife, and wild horse and burro habitat, and watershed management, etc..."

The Preferred Alternative lists land use and resource management decisions. Grazing authorization decisions would be postponed until sufficient data is available to ensure that these decisions are supportable. The Preferred Alternative lists range improvements that along with intensive management would improve the condition of the land for livestock grazing, etc.: treatment of 56,290 acres, 41 water developments, 29 miles of fence. Chapter 2 has been modified to include a more complete description of proposed range improvements. The cost effectiveness of range improvements will be determined by grouping all improvements proposed for an allotment and running a Benefit/Cost Analysis as part of the Allotment Management Plan (AMP).

There are very few allotments in the Alturas Planning Area where livestock grazing is currently suspected to be causing a declining condition. In those areas where it is now known that livestock grazing is indeed degrading a resource, and an equitable and supportable decision can be made, grazing has been excluded in the plan: 350 acres of Sheep Valley, 20 miles of riparian, and 70 spring meadows.

3-2 The ecological range condition inventory data collected in the Alturas Planning Area has established a data base for our monitoring program and management decisions as described in the Final Grazing Management Policy. The inventory itself occurred during 1981. It was a one-time inventory and will be used, according to goals defined in the Final Policy to "provide data for monitoring and assist in establishing resource use levels." However, monitoring is just as important in establishing use levels, as the Policy also requires us to: "Monitor rangeland resources and livestock use to assist in determining proper stocking levels and to evaluate the effectiveness of management actions in achieving resource management objectives." Prior to a decision to change any grazing authorization, sufficient data to support that change must be acquired.

3-3 Where accelerated erosion was known to occur on public lands, as in Sheep Valley in MA 7 and on the Tablelands in MA 1, soil and water became an issue to be discussed within those management areas. Where no problems to soil, water or erosion were known, soil and water was not an issue and was not addressed, as in the remaining management areas.

As the acreage in MA 3 is primarily woodland rather than rangeland, ecological range condition data is not appropriate. The area of MA 5 not inventoried contains about 4 percent of the acreage in the Planning Area and was not a part of the Ecological Range Condition Inventory as the basic soil data has not yet been collected or mapped by Soil Conservation Service. As soil and range site information was not available at the time of the inventory, range condition data for MA 5 is missing. MA 5 is comprised of mainly "C" category allotments where, under the criteria for ranking the allotments, range condition "is not a factor". MA 11 is located in the Surprise Resource Area and was not part of the Ecological Range Condition Inventory done in 1981 by Alturas.

Inventory techniques, data and summary are filed in the Alturas Resource Area Office. Data on range condition was obtained during the 1980 and 1981 field seasons. An occular estimate of condition was made after each party member had training on the SCS 417 production transect - the method SCS uses to originally describe climax communities. Range site information containing climax community information was provided to BLM along with mostly completed soil surveys by Alturas, Susanville, and Big Valley offices of SCS. Where soil surveys were not complete, there was no range site information.

3-4 A discussion of how selective management (M-I-C) categories were determined and the criteria used has been added to Appendix A-2. Worksheets actually used in categorization are available in the Alturas Resource Area Office. Grazing capacity is not a criteria for selective management.

Initially, public comment on the allotment categories was sought from the major user group. Livestock permittees were sent a letter containing the proposed categories after our initial selection on May 7 and May 10, 1982. Meetings were held at four locations throughout the Planning Area on May 15, 18, 20 and 25, 1982. Comment and discussion at these meetings was used to determine the categories listed in the DEIS. The Final Grazing Management Policy (I.M. 82-292) provides that categorization shall be made part of the planning process, and through the DEIS, comment was invited. The only category changed as a result of comment received was the North Tablelands allotment which changed from "M" to "I" as a result of conflicts identified by the user group.

3-5 Page 4-14 explains that the combination of AMP developments, increased livestock forage and improved livestock distribution would improve overall ecological range condition and that vegetation treatments would significantly increase livestock forage. To illustrate: many areas in MA 10 are in fair ecological condition due to excessive sagebrush and juniper. With vegetative treatment to reduce sagebrush and juniper and increase the production of perennial grasses, ecological range condition would improve along with the increase in livestock forage.

3-6 Enclosure 1-18 of the Final Grazing Management Policy states that the recommended minimum alternatives are: proposed action, no action, no grazing, increased grazing use and decreased grazing use. The FEIS production alternative proposes increased livestock use; the balanced alternative proposes existing levels of use until sufficient monitoring shows what level of change in grazing use would best meet other multiple use objectives; the protection alternative proposes decreased livestock levels; the no grazing alternative proposes elimination of livestock grazing and the no action alternative proposes no change to existing livestock levels. A discussion of range management practices such as grazing systems and range improvements have been added to Chapter 2, pages 2-54 and 2-55.

3-7 A discussion of existing season of use has been added to Chapter 3. Any proposed extension of the season of use for grazing allotments would be made on a case-by-case basis only if the request of the livestock permittee for a changed or more flexible season would not adversely affect other multiple uses. This appears to be necessary as several requests are received annually for an extension of the grazing season due to spring weather that delays turn out of livestock or to allow the livestock to make use of, on a temporary non-renewable basis, excess forage. Extending or changing a season of use does not in itself increase livestock use of an allotment. Permanently authorized AUMs can only be increased if additional forage is proven available following sufficient monitoring.

The Key Forage Plant Method to determine forage utilization used in the Alturas Planning Area defines "slight" utilization as 0-2% of annual herbaceous production removed from the key species of a site; "light" as 21-40% removed, "moderate" as 41-60% removed, "heave" as 61-80% removed, and "severe" as 81-100% of annual herbaceous production removed.

In grazing systems where rest for any pasture is allowed during an entire growing season, utilization for that year would be zero. Averaging one or two years "heavy" use with "0" use in the rest year gives a "moderate" overall utilization percentage for the pasture. In other systems with early use pastures, utilization before the start of the growing season can appear "heavy", but since the plants have not yet begun to grow, and as long as livestock are removed prior to the vigorous growth period (around May 1 at Signal Butte, for example),

3-7 (continued)

plants would regrow to full size and net utilization would be "slight". "Moderate" utilization each year is the maximum allowed where no grazing system providing rest during the growing season has been implemented.

3-8 A discussion of the ten existing Allotment Management Plans including their grazing systems has been added to Chapter 3. A listing of possible grazing systems and a discussion of potential vegetative treatments has been added to Chapter 2. Specific types of vegetative treatments envisioned as appropriate at this time have been added to the alternatives and the impacts.

Much coordination, consultation and communication must take place, including on the ground allotment tours, prior to the proposal of any grazing systems. In the process of inventory and EIS preparation, there was not sufficient time to do the necessary consultation and coordination with all affected interests in order to determine the best grazing system for each individual allotment proposed for an AMP. Each allotment will have an individual grazing system prescribed for it based on the objectives of BLM and the objectives of the livestock operator. During development, AMPs normally receive input and review from all affected interests, including the California Department of Fish and Game, and private and State landowners.

3-9 A more detailed discussion of actual resource conditions for each MA has been added to Chapter 3, Affected Environment.

As described in Table 2-1 on page 2-22, MA 7 has been scheduled for development of 6 AMPs, incorporating intensive grazing systems and practices.

3-10 See pages 4-23 and 4-24 for impacts to wildlife and watershed in MA 7 under the balanced alternative. On page 3-40 under Soil and Water, it states that most meadows in the area are under stable condition; however, the main meadow along Sheep Creek has a drainage problem. By excluding cattle from 350 acres, and building control structures as proposed, the main meadow would be allowed to improve. The addition of approximately 5,000 acres in the entire Sheep Valley watershed would improve slightly through implementation of grazing systems.

3-11 An addition has been made in Chapter 1, page 1-5, to show that final grazing decisions would be issued after sufficient data is gathered through monitoring to support an equitable decision, except where livestock are to be totally excluded as identified in the FEIS.

3-12 The allotments in MA 11 are in the custodial management category as they contain 70-80 percent private land. There is no feasible way to fence out the public land or to manage it differently than the private land. As long as the permittees meet the limited objectives set by BLM and manage the allotments without degrading present conditions, they would have the lead in determining how to manage these allotments.

3-13 Due to comments received during the public comment period, the acres and parcels of land identified for potential disposal have changed. This is reflected in Chapter 2, page 2-45. This parcels identified for disposal are more numerous in Alternatives I and II than in Alternative III. Disposal would remove several allotments from production under BLM's jurisdiction (Alternatives I and II), reducing the total number of AUMs authorized by BLM below that in Alternative III where many of these allotments would continue to be authorized for livestock use. (See Appendix C for allotments affected by potential land disposal.)

3-14 Chapter 3, Affected Environment, has been lengthened to provide more background information for the wildlife resources in the Planning Area. Chapter 4, Environmental Consequences, has added detail to provide the reader with better cause and effect descriptions of impacts.

3-15 Key habitats are identified in Chapter 3, Affected Environment, page 3-9, and further highlighted under Specific Resource Descriptions in Chapter 3 for each MA.

3-16 The revised document provides a sequence as described in the comment with additional detail in Chapters 3 and 4. The wildlife objectives are indicated in Chapter 2, Alternatives. The problems and constraints are described in Chapter 3, Affected Environment. The results or environmental consequences are described in Chapter 4.

3-17 See Summary on page i for discussion of ACEC treatment within the plan. Discussions of Pit River and Tule Mountain WSAs have been expanded to provide the reader with the necessary background information in Chapter 3. Chapter 2, Wilderness Management Rationale for the Preferred Alternative, provides information on the deletion of the South Warner Contiguous WSA by Secretarial Order and further rationale for non-wilderness recommendation under Section 202 of FLPMA, page 2-46.

3-18 The threatened and endangered plants do not occur within the Tule Mountain WSA as depicted on Map 3-4.

3-19 The Preferred Alternative Rationale in Chapter 2, page 2-45, provides explanation of management problems and their assessment with regard to boundary adjustments on the Pit River WSA. Information in Chapter 3, Affected Environment, provides background information for those decisions.

3-20 Boundaries of the Pit River Canyon wilderness proposal were altered as a result of public input.

3-21 See Summary on page i for analysis of issues dropped.

3-22 See page 3-40, Soil and Water, for discussion of resource values and problems in Sheep Valley.

3-23 See response to comment letter 1-4 and 1-5 for timber constraints and guidelines as they relate to the timber management program.

Constraints and guidelines on future mineral exploration and development activities have been added on page 2-49.

3-24 Chapter 3, Affected Environment, has been revised to show existing and potential mineral exploration and development at Hayden Hill, page 3-51. Consequently, the impacts in Chapter 4 now describe the effects of mineral development to wildlife, range, etc.

3-25 Chapters 3 and 4 have been revised to show existing and potential uses of flat rock and cinders within MA 7 of the Planning Area. Likewise, the environmental consequences now analyse the effect of these uses on wildlife, etc.

3-26 Existing oil, gas, and geothermal lease acreages and number of applications have been added to each MA in Chapter 3. Future lease applications or development is governed by the CFR 3100 and 3200 Regulations for leaseable minerals. Site-specific environmental assessments will be completed on each action prior to issuance of the lease. See page 2-48, Supplemental Program Information and Guidance.

3-27 See response to comments 1-4 and 1-5.

3-28 See response to comments 2-18 and 2-19.

Appendix B-1 has been added to the document and describes the land disposal criteria used in determining the retention or disposal of public lands. It also describes the criteria of other resource values considered to evaluate the disposal of lands within each alternative objective.

Substantial revisions to Chapter 4 have been made to analyze the effects of land disposal on wildlife, range, etc. The Preferred Alternative has also deleted approximately 2,500 acres of key wildlife habitat from land disposal designation, eliminating much of the impacts to wildlife resources (page 2-45, Preferred Alternative).

720 Washoe
Susanville CA 96130

July 13, 1983

#

District Manager Rex Cleary
Area Manager Richard Drehobl
BLM
P.O. Box 1090
Susanville

PROPOSED ALTURAS RMP AND DEIS

Dear Gentlemen:

Thank you for this opportunity to comment. I incorporate by reference my oral comments at the May 23 wilderness hearing, in favor of a Pit River Canyon Wilderness and in favor of retaining the S. Warner Wilderness Contiguous WSA.

According to DEIS p. 1-1, much of the planning area has sub-standard range conditions, and "wildlife habitat such as riparian and meadow areas are being degraded." FLPMA and PRIA require that BLM improve unsatisfactory range conditions. The public supports this. Yet there are few specifics in the DEIS to show how BLM will improve conditions. Rather, the plan frequently calls for more grazing pressure.

Each new EIS the Susanville District issues seems to stray farther from the NRDC v. Morton judgment. I appreciate the difficulty in preparing the first Resource Management Plan, and combining it with a grazing EIS. There are several very good features; a concise document; clear, concise writing; very well structured, clear tables such as 2-1 and 4-1, which are easily compared; good clear maps in chapter 3. Also good is the disclosure of numbers of livestock and of AUM's; of utilization levels; and sometimes of specific season of use. The DEIS does, however, lack some key information needed to help the job of improving the public range lands; it lacks a level of specificity; it lacks a detailed monitoring plan; and it shows a consistent bias toward livestock grazing at the expense of other resources. Thirdly, the proposed action slashes a tiny Pit River Canyon WSA (11,575 acres) into a much tinier proposed wilderness (5775 acres), which would apparently be the smallest Federal wilderness outside of New Hampshire and offshore islands. This was done to avoid "difficulty to manage," yet making such a tiny wilderness creates new management problems.

Below are constructive comments.

Pit River Canyon

Pit River Canyon is the most remarkable feature in this resource area. In the context of BLM's RMP planning process, therefore, I first recommend an 11,575 acre Pit River Canyon Wilderness.

Secondly, because of its outstandingly remarkable values (scenic, wildlife, recreation, historic, prehistoric, etc.), I nominate the Pit River corridor through BLM lands as a Wild and Scenic River segment. This certainly seems to meet the criteria for a Wild River. 4-1

Thirdly, I nominate the Pit River Canyon WSA as an Area of Critical Environmental Concern (ACEC). Because of its environmental significance it meets the BLM criteria for identification of Relevance, Imporyance and Special Significance. It matches BLM's "Illustrative Examples" (Guidelines for ACEC's, August 1980) of (1) Cultural Value, (2) Scenic Value, (3) Fish or Wildlife Resource, and (4) Natural Systems. This is consistent with FLPMA, which states in Section 202(c)(3):

> In the development and revision of land use plans, the Secretary shall ..., (3) give priority to the designation and protection of areas of critical environmental concern.

This Alturas RMP is the development of a land use plan. Until a final decision, I suggest Pit River Canyon be managed as a proposed ACEC, as well as protected as a wilderness study area.

Specific Comments

4-2 p. i Why was each of the four issues dropped? How and when will they be addressed? What happened to the five or so other resources that are scarcely mentioned in the DEIS -- recreation, wetland/riparian, socioeconomics, minerals/energy, soil and water, etc? Is BLM saying soil and water is insignificant in most MA's?

4-3 p. ii - x Notice the summary impacts resulting from the proposed action:
- o 37 allotments out of production after land disposal.
- o Potential large-scale habitat losses if disposed parcels developed.
- o Moderate loss of timber resources and revenues after land disposal.
- o Slight degradation of cultural values.
- o Loss of sensitive plant populations in case of land disposal.
- o Slight to moderate adverse impacts on undesignated WSA's.
- o Significant adverse impacts on four permittees from land disposal.

Clearly, these impacts are cumulatively significant. Mitigation measures listed later do not mitigate these. Notice that five of these effects would be avoided if the land disposal measure were eliminated from the proposed action. Clearly, the land disposal is a bad idea, and I would suggest it be dropped. Two other adverse effects would be lessened by maintaining or reducing present grazing levels, which I also suggest.

4-4 p. 2-2 Footnote. What is planned to start collecting such missing data as this on AUM's for wildlife, watershed, and riparian? A basic information need.

4-5 p. 2-4 Is it cost-effective to intensively manage only a 57 acre unit? Would the small patch of timber be more valuable left standing as old growth wildlife habitat and recreation area? Same question applies to other MA's with similar timber patches. What cost-benefit research has been done?

4-6 p. 2-5 How does selling these public parcels improve BLM's "manageability" of them? Why not instead have "Same as Alternative III"? The same question applies in all other MA's with this proposed disposal study.

4-7 p. 2-6 (RANGE) This is typical of a recurring objection I have throughout the MA's. The 5113 new AUM's would more than double present use. What are the data justifying this? Specifics are absent. The monitoring "system" shown (p. 2-44 and 45) is a sketchy outline and inspires no confidence that it can "determine" when this big increase should occur.

4-8 Why allow a 30+ day increase? Which 30 days? This illustrates the recurring problem of allowing increased grazing with "floating" seasons of use. Pin down to specific dates, so the public can know what is going on.

4-9 Why allow "heavy utilization"? Another recurring objection I have throughout the MA's. For good range management, shouldn't it be limited to moderate?

Similar objections to the above also on p. 2-13, 2-16, 2-22, 2-26, 2-31, etc.

4-10 p. 2-17 I suggest you move the fourth, fifth, and seventh measures to the proposed action. These special wildlife species need and deserve more protection. Also consider protecting future and potential nest trees. The present ones are going to die some day and recruit nest trees (and pilot trees) are needed.

4-11 p. 2-23 (WATERSHED) This protects only 350 acres, less than 10% of the degrading acreage. I suggest you replace this with Alternative III.

more

p. 2-24 I suggest moving the Support Needs of III to II and the preferred alternative to protect the small, sensitive area. (WATERSHED)

p. 2-26 RANGE I strenuously object to the proposed authorizing of more AUM's, more suspended non-use, more season of use, and heavy utilization, all within or near the WSA of Pit River Canyon. I believe grazing should not be increased in the WSA or the wilderness. Other multiple values take precedence: watershed, wildlife, botanical, recreation, aesthetic, cultural. I support the Archaeological District designation for Pit River; however, increasing grazing would be counter-productive. BLM's idea of multiple use may be backpacking beside a herd of cows; but mine is not. To maintain wilderness values at today's level grazing should not be increased; to enhance them, it should be decreased.

p. 2-26 WILDERNESS I would suggest terminating existing ways outside the edges of the wilderness to keep out ORV intrusions; however, I would support continued motorized access for the two permittees to maintain range improvements in their allotments.

4-12 P. 2-26 Footnote There is no allotment map. The EIS information is not site-specific. I could not tell where each allotment was in relation to the WSA, so one cannot tell where grazing increases would occur. Thus the impacts are not linked to the ground, which is the whole idea of an EIS. I would like to know specific effects of grazing on the WSA.

p. 2-27 Suggest moving the second and sixth measures from Alternative III to II and the preferred alternative.

4-13 p. 2-28 Suggest replace the small 200 acres with the needed 1300 acres.

4-14 p. 2-28 A section on MINERALS/ENERGY seems very appropriate but missing here (see p. 2-38 bottom).

4-15 p. 2-29 "Allow flexibility in season of use..." is vague . BLM should have enough data to establish an initial season of use. If necessary to change later, then it can be done within the planning process by a plan amendment. This also applies to other MA*s where season of use is open-ended.

p. 2-31 RANGE Again I disagree with allowing additional livestock and heavy utilization. I suggest existing use and moderate utilization.

p. 2-33 MINERALS Why no similar provisions for protection from oil and gas? I support both.

4-16 p. 2-34 I approve of designating sensitive plant locations "as a Research Natural Area", or Areas if appropriate, along with the other protective measures. However, what about annual monitoring? Also, nothing is proposed to specifically protect the endangered plant in the Termo Lane and Coffin Allotments. Why? I suggest this also be made an RNA and/or exclusion area from cattle and OHV's. The same questions and suggestion also applies to the Hayden Hill plant.

4-17 p. 2-36 RANGE I object to "livestock operators have the lead in determining grazing management." That is BLM's responsibility, to lead the grazing management of our public lands. Not to follow. I disagree with the deregulation of grazing management.

4-18 p. 2-37 T & E PLANTS The monitoring is good, but what is being done to protect the two sensitive species?

4-19 p. 2-37 LANDS I strongly oppose disposing of these WSA parcels. During the previous Administration they were eligible additions to the S. Warner Wilderness, which is where they still belong. Privatizing them may have adverse impacts on the Wilderness itself, lying immediately adjacent. They should remain public.

p. 2-38 The last sentences seem to consider it an advantage that "only 5800 acres of public lands" will be withdrawn from mineral entry, leaving 98 percent of the planning area open to mineral entry. It could also be pointed out that with a full Pit River Canyon Wilderness, only 11,575 acres would be withdrawn, leaving 95 percent open. Not significantly different. And:

p. 2-39 Conversely, the approximate 100 percent increase in the size of the wilderness from 5800 to 11,575 acres would have significant wilderness benefits. These benefits should override BLM's perceived disadvantage of it being "difficult to manage" -- which is questioned above.

p. 2-39 As stated, I do not believe the rationales are valid for excluding half of the Pit River Canyon WSA from wilderness, and the S. Warner Wilderness Contiguous WSA from wilderness suitability.

p. 2-42 and Chapter 4 One of the main objections is that unlike previous Susanville EIS's, this one does not give any grazing systems. What is happening to the public land -- year-long grazing? Deferred grazing? Rest-rotation grazing? 4-20 "Livestock operators have the lead?" Given that lack of grazing system data, how can you predict the environmental consequences? Are the Chapter 4 effects the effects of grazing systems you have not developed yet? Then what is their likliehood of occuring? I would like to see grazing systems in this EIS, not deferred to the AMP's.

p. 2-43 Specifically (not generally) how will the infamous M-I-C prioritization 4-21 system be implemented in this plan? How will it work in the resource area? How do you decide priorities across M-I-C classes, for example are the I allotment water facilities done before or after the M allotment monitoring, or AMP? More specifics are needed.

p. 2-44 This 2-page monitoring outline is inadequate for the resources and the RMP. First, how will you monitor the implementation of the RMP itself as opposed 4-22 to the AMP's? How will you know whether the RMP's objectives are met? Secondly, what are the specifics: monitoring frequency, units of measure, tolerances, and actions if objectives are not achieved?

4-23 p. 2-45 In the seventh sentence, why not add "threatened" species in case some are later listed?

p. 4-1 through 4-26, Chapter 4 The list of significant adverse environmental impacts is very extensive. Their cumulative effect is a significant deterioration of our public lands and resources. This is in my opinion unacceptable. The preferred alternative should be reshaped or replaced with Alternative III to minimize the following unacceptable impacts:

4-24

p. 4-4 CULTURAL	p. 4-13 FUELWOOD
p. 4-7 FUELWOOD	p. 4-15 RANGE
p. 4-8 CULTURAL	p. 4-15 FISH & WILDLIFE
p. 4-10 FISH & WILDLIFE	p. 4-16 CULTURAL
p. 4-10 CULTURAL	p. 4-18 TIMBER
p. 4-11 FUELWOOD	p. 4-21 CULTURAL
p. 4-13 FISH & WILDLIFE	p. 4-27 T & E PLANTS
	p. 4-31 CULTURAL
	p. 4-34 T & E PLANTS

p. 4-37 MITIGATION MEASURES These mitigation measures will be "considered" (third sentence). Yes, but what ones will be implemented? When? Where? Specifics are again needed.

4-25 R-3 "U.S. Department of Interior" seems to be missing from the references.

Other Comments

4-26 o The preferred alternative is difficult to track in the document; it does not appear at all in Table 2-1 or 4-1.

4-27 o Just as there are no grazing systems in the EIS, there are also no silvicultural systems. How are you going to harvest trees? How are you going to regenerate the land? Are you going to thin? How much old growth are you leaving? Where? What rotation age? What is "intensive management"? What is the demand for the timber? Is the timber program cost-effective? Why harvest at all? What is the assurance that marginal sites will not be logged? Why aren't these basic questions answered?

4-28 o What is the period for which the plan is intended?

o What is the next step in the planning process? What, in fact, are the steps?

o What are the needs and plans for new data collection?

o What are procedures for updating, amending, or revising the plan?

o Finally, you have already received many comments on your proposed Pit River Canyon Wilderness. In your Susanville District files are dozens of letters responding to the WSA inventory that called for a larger Pit River Canyon Wilderness. They cite many study phase factors in support of wilderness, which BLM said it would consider during the study phase. Have these dozens of pro-wilderness comments been read and considered by your planners? If not, I now incorporate them by reference, including my 1979 and 1980 letters, into these comments.

Thank you for considering this and other public input in formulating your FEIS and Resource Management Plan. I certainly hope it shows more specifics, less bias toward grazing, and the full-sized Pit River Canyon Wilderness that that beautiful area deserves.

Sincerely,

Curtis Spalding

Dept. of Interior
RECEIVED
JUL 15 1983
BUREAU OF LAND MANAGEMENT
SUSANVILLE, CALIFORNIA

Response to Letter No. 4

4-1 Though a series of overlapping protective designations are possible by law, wilderness designation would provide the most comprehensive protection. The utility of additional designations is unclear.

4-2 The four issues were dropped because they did not surface in any of the MAs as significant issues requiring land use allocations. The other five resources mentioned are covered in the FEIS in MAs where they surfaced as issues. BLM is not saying soil and water is insignificant in most management areas but that significant soil and water problems/issues are not occurring in most management areas. The ACEC discussion on page i has been expanded.

4-3 See response to comments 2-18 and 2-19. The entire document has been revised to reflect the retention of approximately 4,700 acres of key resource values and 4,600 acres adjacent the Warner Mountains.

4-4 AUM allocations for wildlife habitat would not be made. Management actions would be based on condition, trend, and utilization monitoring with the goal of improving or stabilizing these resources.

4-5 See response to comments 1-4 and 1-5. See Social and Economic Conditions on page 3-22 and Table 4-1, Socioeconomic Impacts Area Wide, page 4-57.

4-6 See response to comment 3-28 addressing land disposal.

4-7 Items 10 and 11 have been added to the Supplemental Program Information and Guidance section to explain the Bureau's monitoring system in relation to the adjustment of livestock AUMs, page 2-50.

The plan has been modified to read "Adjustments of livestock stocking levels and season of use would be completed only after sufficient data to support a decision has been collected", page 1-4.

4-8 A discussion of existing season of use has been added to Chapter 3, page 3-3. Any extension of season of use for grazing allotments would be made on a case-by-case basis. Permanently authorized AUMs can only be increased if additional forage is proven available following sufficient monitoring.

4-9 See response to comment 3-7 for a description of utilization levels.

4-10 The protection of potential nest trees is considered in timber sale environmental assessments. Other nest sites, when selected and occupied by raptors would receive protection as stated in Alternatives II and III.

4-11 The 5,400 acre figure includes the entire watershed. Only 350 acres of meadow and riparian habitat along Sheep Creek have been identified as a problem related site relative to livestock grazing. Intensive rehabilitation efforts would restore the watershed through the development of BMPs as prescribed on page 2-51.

4-12 Any future increase would occur within the allotment boundaries as additional forage becomes available. As vegetative treatments would occur outside the WSA boundaries, then the increase in available forage would accrue there and would be used there as well. No fencing is proposed.

4-13 The balanced alternative for MA 8, Table 2-1, pages 2-27 and 2-28, has been revised to provide for acquisition of 740 acres within the wilderness area.

4-14 See page 3-44, Minerals, which states that there are no occurrences of mineral resources within Pit River Canyon; consequently, no mineral alternatives were arrayed.

4-15 "Allow flexibility in season of use of up to 30 days" means the same as "increased season of use up to 30 days" as proposed in MAs 2, 4, 5, 7 and 8. See response 4-7.

4-16 The endangered plant (Lomatium ravenii), though not officially delisted, no longer has endangered status. It has been found much more abundant in California, Oregon, Idaho, and Nevada. There is no threat to the plant in California and it is not noticeably grazed by livestock. See page 2-57.

4-17 The allotments in MA 11 are in the custodial management category as they contain 70-80 percent private land. There is no feasible way to fence out the public land or to manage it differently. As long s the permittees meet the limited objectives and manage the allotments without degrading present conditions, they would have the lead in determining how to manage the allotment.

4-18 Currently, no identifiable impacts are affecting the plant. Monitoring would identify these should they occur and appropriate management would be prescribed.

4-19 See response to comment 2-18.

4-20 See response to comment 3-8.

4-21 Funding for monitoring are separate from funding used for construction of range improvements. Where monitoring is needed most (to answer specific questions, determine actual levels of use or impact) it would be done first. "I" allotments, because in these allotments most questions are raised, have priority for extra monitoring. Ongoing monitoring on existing AMPs (both "M" and "I" categories) would

4-21 (continued)

continue. Range improvements would be scheduled for I allotments first in order to increase productivity or alleviate conflicts. Ranking of allotments for range improvement dollars is based on the following: management category (C-M-I), total cost of implementation of an AMP, Benefit/Cost, IROR%, critical resource values, use conflicts, percent of allotment use, ranch viability without an AMP, public controversy, cost per added AUM, and other criteria as may be necessary. Implementation of an entire AMP would generally have priority over small range improvements scattered in several allotments. See Appendix A-2.

4-22 Upon final publication of the EIS, all future activity plans would tie back to the plan for guidance. As each year's Annual Work Plan is prepared, a portion of the activity plans (AMPs, HMPs, BMPs, etc.) would be scheduled for development and for implementation. Implementation of the plan would be accomplished through the regular tie back of activity plans to the RMP/EIS objectives.

4-23 The addition of the word "threatened" has been added to the suggested paragraph on page 2-57.

4-24 See response to comment 3-18.

4-25 The reference (page R-3) has been corrected.

4-26 See page 2-45, Preferred Alternative.

4-27 See response to comments 1-4 and 1-5.

4-28 The live of the plan is 10 years with provisions for monitoring and evaluation at 5 year intervals.

A Record of Decision will be issued following publication of this FEIS. The Resource Management Plan will contain the decisions on all of the land use recommendations proposed. It will also contain a section on implementation. Implementation will guide the order in which projects are implemented and will also be tied to the budget process and applied annually to determine the order that projects will be accomplished.

The Record of Decision will be the approval authority for implementing the land use allocations, broad objectives/goals, and other actions contained in the Preferred Alternative. However, activity plans and environmental assessments will be required prior to conducting specific actions such as timber harvesting. For example, forest management plans will show specific project locations; describe and analyze the impacts of specific actions associated with development, operation, and rehabilitation of the project, and compare project costs with project benefits.

#5

May 12, 83

Dear Sirs,

I would like to comment on the cutoff allotment. You have given me a grazing permit on this cutoff allotment and I would like to continue it with you as a permittee as it will hurt my operation if it is sold. It really fits good with my operation.

If you sell it, I would like to have option to buy or meet the top bid.

I also have land on Fitzhugh Creek, that you can manage with your surrounding lands; that I would be willing to trade for equal value. It is fenced and if you would like to trade, I would like to know if you also would trade permits.

5-1

This land has Fitzhugh Creek right through the middle of it that runs water year round, and good fishing. The land also has wood trees and a perfect spot for a very large reservoir if the environmentalists or government ever decides to save our pure, clean water from running into the ocean and go to waste.

I talked to my neighbor Jim Van Loan

whose land borders the cutoff allotment on two sides and his permit borders one other side. I asked him if he planned on buying it and he said no, but he would like to see me buy it because we get along real good and he would like to have an easement to cross his cattle on to the tableland as he has always considered that as a natural stock drive to and from his permit and back home again. I also told him if I ever owned the land that I would give him an easement to cross his livestock anytime he wanted. He doesn't want an outsider to get the land in fear of having no way to get his livestock to and from his permit on the tableland.

Sincerely yours,
Valentine Jochim

Response to Letter No. 5

5-1 Lands identified for potential disposal would be sold at fair market value in a competitive or modified competitive procedure. Your name has been placed on file to receive further notification of the sale of this allotment.

Future exchange proposals may be accepted to enhance the objectives of the plan. New exchange proposals will be considered outside of the EIS process in accordance with Section 202 of FLPMA, as shown on page 2-48.

Van Loan Ranch

KENNETH VAN LOAN
P.O. BOX 427
LIKELY, CA 96116

JIM VAN LOAN
P.O. BOX 125
LIKELY, CA 96116

#6

May 13, 1983

Dear Sirs -

I am writing this letter in regard to the future sale of BLM land that lies between highway 395 and county road 189 near Likely, Calif. That particular piece of land is a natural drive for cattle from our ranch to the lower tablelands. If it is sold, I would like to make a request for an easement or better yet, a fenced lane so that I would not have to make a long detour around this land. 6-1

Thank you.

Sincerely,
Jim Van Loan

Response to Letter No. 6

6-1 Prior to the disposal of public lands, environmental assessments and land reports will be prepared. These reports would address concerns such as existing and historical uses, natural resource values, etc. Through this process, right-of-way grants would be issued to allow historical uses such as stock driveways.

United States Department of Agriculture
Soil Conservation Service
2828 Chiles Road
Davis, CA 95616
(916) 449-2855

#7

May 25, 1983

C. Rex Cleary
District Manager
Bureau of Land Management
P.O. Box 1090
Susanville, CA 96130

Dear Mr. Cleary:

We acknowledge receipt of the draft environmental impact statement for the Proposed Resource Management Plan for the Alturas Resource Area, Lassen and Modoc counties, California.

We have reviewed the document and have the following comments:

7-1 1. There are many critically eroding areas within the resource area such as gullies and natural waterways in meadows. Some of these, once eroded deep enough, lower the water tables and reduce potential cover and forage. We feel that identifying these critical areas and prescribing appropriate treatment should be an item of concern of the Resource Management Plan.

7-2 2. Limited technical assistance is available from our offices in the area to assist in this important task.

We appreciate the opportunity to review and comment on this document.

Sincerely,

Gene Andreuccetti

EUGENE E. ANDREUCCETTI
State Conservationist

Response to Letter No. 7

7-1 The significant erosion problem areas within the Planning Area have been identified in the Affected Environment, Chapter 3. These areas include: MA 1 - Likely Tablelands roadways and Fitzhugh Creek, and MA 7 - Sheep Valley. Best Management Practices (BMPs) would be developed for these areas as identified in the Alternative Table 2-1 and prepared at the activity plan level. As additional problem areas are identified, activity plans will be developed separately or more jointly in preparation of Allotment Management Plans or Habitat Management Plans.

7-2 We look forward to any assistance SCS can provide in identification of erosion problems. Consultation will also be initiated during the preparation of BMPs. Most often, water sources and meadows, even if surrounded by public lands, are under private ownership. SCS can provide valuable assistance by working with these landowners directly.

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
Modoc National Forest
Big Valley Ranger District
Adin, California 96006

#8

2730

June 17, 1983

District Manager
Bureau of Land Management
P.O. Box 1090
Susanville, CA 96130

To Whom It May Concern:

In reviewing your Draft EIS for the Alturas Resource Area, my only concerns and comments center around those lands identified for disposal. Several parcels in the Big Valley area have roads passing through them that are
8-1 essential for the management of National Forests lands. Prior to any consideration for disposal, I recommend that the right-of-ways issued be clearly stipulated for recognizing existing road uses and access.

I have received several calls from concerned ranchers that have had "historical" access through some of the parcels. If you could provide a more detailed map showing these parcels, I could do a better job of responding to these inquiries. Such a map may also help us to identify the aforementioned right-of-ways that provide access to National Forest lands.

Sincerely,

HARRY CROFT
District Ranger

Response to Letter No. 8

8-1 Environmental assessments will be completed on each parcel or block of public lands prior to disposal. Through this assessment process, access and other existing uses would be recognized and protected by the issuance of rights-of-way, easements, etc.

4435 Brindisi St
San Diego CA. 92107
June 27, 1983

#9

C. Rick Cleary
Susanville BLM District
Dear Sir.

In my opinion, the Alternative III is the only one which provides adequate protective management for the Alturas Resource Area. I feel we must preserve for the future, ~~ass~~ while the opportunity still exists, our treasure wilderness resources. I have concern over increasing by 30 days the grazing season because the areas are already over grazed, and about the building of 46 new stockwater impoundments and 37 miles of fenceline at taxpayers' expense

9-1

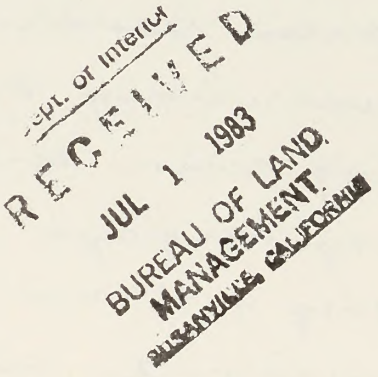
Adequate protection should be provided from logging, mining, wood cutting and grazing for endangered plants and wildlife. It's with great regret I see the tendency to shrink wilderness acreage. Consequently I urge that the scenic Pitt River Study area,

9-2

the South Warner Contiguous, and the Tule Mountain Wilderness Study be recognized for their importance to the environment and saved for future generations.

Sincerely,

Marguerite Christoph



Response to Letter No. 9

9-1 Water impoundments not only supply livestock and wildlife with water but provide us with potential fisheries and waterfowl improvements. Reservoirs and fences are only two of several ways to evenly distribute livestock over an allotment, providing a more uniform utilization pattern, and discouraging overgrazed areas. Extending season of use would be done on a case-by-case basis, and only after it has been determined that excess forage is available. Funding for range improvements is largely provided through grazing fee receipts paid by the permittees.

9-2 The Standard Operating Procedures on pages 2-50 to 2-52, numbers 7, 9 and 12, direct management and protection of these resources in all alternatives. Alternatives II and III also provide for exclusion of livestock from 20 miles of riparian habitat and meadow habitats at 70 sites.

June 28, 1983

29900 Highway 20
Fort Bragg, California 95437

#10

Mr. C. Rex Cleary
District Manager
Bureau of Land Management
P.O. Box 1090
Susanville, California 96130

Public Hearing Record

Alturas Resource Area Management Plan

Dear Mr. Cleary:

Thank you for the copy of the Alturas Resource Area Draft Resource Management Plan and Environmental Impact Statement which I recently received. I have carefully reviewed this document and have these comments for the public response record:

My concerns with the proposed management plan lie primarily in two areas - Inadequate wilderness designation, and the unsuitability of the BLM preferred alternative for management purposes.

First of all, the BLM preferred alternative for the Alturas does not protect public lands, and the public purse, from continued overgrazing and use of public monies for range improvements that benefit only private interests. Critical natural areas are not protected with ACEC designations. Archeological sites, raptor nesting habitat, riparian zones, and endangered plants are inadequately protected from logging, mining, fuelwood cutting, and grazing. Approximately 22,600 acres of public land is inventoried for potential sale, including important grazing land and critical natural areas.

10-1

I frankly see no way that the BLM preferred alternative can be modified to meet the most minimal requirements for sound land management. I recommend abandonment of the present preferred alternative, and adoption of Alternative III, which would protect all 28,525 acres of roadless land in the three study areas, provide for resource recovery from present overgrazing, AND WHICH WOULD provide maximum protection for riparian areas, archeological sites, and endangered plant and wildlife species from resource exploitation.

The second major problem with the Draft Management Plan is inadequate wilderness designation. The Pit River Study Area survives with less than half of its original acreage recommended for wilderness. The 4,000-acre South Warner Contiguous areas are completely deleted for reasons which are not at all clear, and proposed for sale. The 16,950-acre Tule Mountain WSA is declared non-suitable for cause even more obscure.

10-2

BLM should recommend wilderness status for all of the Pit River, South Warner Contiguous, and Tule Mountain Wilderness Study Areas. This action, together with recommendation of Alternative III, should provide the sound, balanced land management that the Alturas Resource Area so richly deserves.

Please keep me informed of progress towards sound land use planning for the Alturas.

Sincerely,

Ron Guenther

Response to Letter No. 10

10-1 The Preferred Alternative, page 2-45, has been revised to delete approximately 9,300 acres of public lands from disposal designation. Appendix B-1 now describes the disposal criteria used to evaluate retention or disposal of the parcels presently identified. A screening process evaluated the parcels within the objective of each alternative to assure retention of those areas critical to the overall management objectives.

10-2 See Wilderness Management Rationale in Chapter 2, page 2-48, for additional discussion on South Warner Contiguous WSA decisions. The Pit River wilderness proposal has been enlarged to include 6,640 acres. An expanded discussion of wilderness characteristics has been added in Chapter 3, Affected Environment.

Wildlife Management Institute

Suite 725, 1101 14th Street, N.W., Washington, D.C. 20005 • 202/371-1808

DANIEL A. POOLE
President
L. R. JAHN
Vice-President
L. L. WILLIAMSON
Secretary
WESLEY M. DIXON, Jr.
Board Chairman

#11

July 5, 1983

District Manager
Bureau of Land Management
Post Office Box 1090
Susanville, California 96130

Dear Sir:

The Wildlife Management Institute is pleased to comment on DRAFT ALTURAS RESOURCE AREA, RESOURCE MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT, California.

The plan is one of the most difficult to read and to locate specific proposed activities as we have seen. It is not satisfactory for wildlife.

11-1 All grazing adjustments are postponed for five years of monitoring, in effect throwing away all data collected in the past. There is no table of AUM allocations; they are nearly impossible to extract for comparison between resources, especially wildlife AUM.

11-2 There is no table of proposed range developments or their costs. There is no proof of the effects of elements in the plan, and no master table showing overall environmental effect.

11-3 Nongame is given insufficient consideration. There is no listing of the goals of the California Department of Fish and Game and no explanation of how this plan will meet those goals.

11-4 Discussions of the effects of land disposal on wildlife are not considered. Since many of these areas are on winter range and other key habitat, this is a major environmental effect.

Some specific comments follow:

11-5 Page 2-23. "Continue intensive timber management." This is not a silvicultural method and must be explained in detail.

11-6 Page 2-26. Management Area 8. This area has 310 livestock AUM, and will authorize 41 suspended non-use AUM. To do this there will be vegetative treatment on 1,900 acres and 4 stock water developments. This should be compared against a charge of $1.40 per AUM.

DEDICATED TO WILDLIFE SINCE 1911

11-7 Page 2-45, No. 7. Will wildlife stocking be determined by "effected users"?

11-8 Page 2-46. Who will do all this wildlife monitoring?

11-9 The present active AUM are 50,464. As nearly as we can ascertain, the preferred alternative grants 48,660 AUM with the restoration of 32,070 AUM now in suspended non-use. This could be done by monitoring and negotiation with permittees. No public involvement or consultation with the California Department of Fish and Game is required. The possible increase of 66 percent is both arbitrary and too high.

These remarks have been coordinated with William B. Morse, the Institute's Western Representative.

Sincerely,

Daniel A. Poole
President

DAP:lbb

Response to Letter No. 11

11-1 See response to comments 3-1 and 3-2 for adjustment of livestock AUMs.

11-2 The Summary of Range Improvements in Table 2-2 illustrates the proposed range improvement projects for the 10 years following this plan. The estimated costs of implementation can be derived by using the unit cost table shown in Appendix A-3. The environmental effects of these range improvements would be thoroughly examined on a case-by-case basis as each project is planned.

11-3 The plan addresses issues identified by the public early in the EIS process. Nongame wildlife was not identified as an issue but will be addressed in Habitat Management and Allotment Management Plans. This plan does include projects beneficial to nongame such as spring and meadow protection, aspen rehabilitation, and overall livestock adjustments based on condition and trend data.

California Department of Fish and Game input was received for key species and considered under this plan.

11-4 For the draft plan, potential disposal parcels were dropped during a screening process where key habitats were identified. Additional acreage was dropped in this final document as a result of public input. See Appendix B-1 for criteria used in parcel selection. Habitat losses are addressed in more detail in Chapter 4, Environmental Consequences.

11-5 See response to comments 1-4 and 1-5.

11-6 MA 8 has been revised. There are now only four stockwater developments proposed. Water developments would have economic benefits by creating a more uniform grazing pattern and, along with improved management, eliminate overgrazing around existing reservoirs.

11-7 Wildlife population goals and habitat requirements and condition would be determined through monitoring and consultation with California Department of Fish and Game.

11-8 Monitoring would be conducted by BLM personnel.

11-9 See response to comment 2-1.

LASSEN-PLUMAS COUNTIES
ALCOHOL and DRUG DEPARTMENT

JIM MAHAN
Administrator

#12

July 12, 1983

Dear Sir:

This letter is intended as a written comment upon the proposed Resource Management Plan for the Alturas Resource Area, 1792 (C-020).

It appears that the four alternative plans have been well researched. The proposed alternative though much of it is the same as Alternative II, is not as balanced between production and protection. One can look at the first page of the cumulative summary and so that the Preferred Alternative is almost the same as the Maximize Production Alternative. For me this is not balanced enough. I am in favor of further protection of public land resources.

12-1 For example, the use of range land is a critical issue in preservation. Any substantial increase in grazing and fencing would disturb and degrade the natural and cultured values of the area. The increase of production and commercial use, will have unavoidable adverse impacts of wildlife, habitat degradation, deterioration of riparian & meadow habitat and an overall acceleration of the depletion of cultural resources.

Secondly, I am concerned that critical natural areas like the Pitt River study area, South Warner contiguous areas and the Tule Mountain area are woefully neglected for adequate consideration in the National Wilderness system. Because of its importance for raptor habitat, the entire Pitt River area should be recommended for inclusion in the wilderness system. Other advantages can be stated for the inclusion of the other two roadless areas under consideration within this overall resource plan. The report mentions 3 separate areas of sensitive plants that occur in the Tule Mountain MA. These are, important items that further sway my decision toward further protection rather than more production and hence degradation.

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WILDLIFE

476 ALEXANDER AVENUE
SUSANVILLE, CA 96130
(916) 257-8311, EXT. 195

314 JACKSON STREET
QUINCY, CA 95971
(916) 283-0251

VETERANS MEMORIAL BLDG.
MAIN STREET, SUSANVILLE
(916) 257-8311, EXT. 199

Many specific concerns could be culled from the report but the overall view I take is that the preferred alternative is not acceptable to me or perhaps others as well. I support Alternative III as a more balanced option, that puts protective ahead of short term production gains and thereby keeping much of our pristine resources intact. A final word on the mitigation measures that are intended to lessen the adverse impact of alternatives one and two. The measures may help alleviate some harm to the resources but increases in livestock use allotments and aerial spraying for vegetation treatment are not things I would support as being beneficial, especially if one is to maintain high water quality. Recent community action against the aerial spraying of herbicides like 2,4-D control suggests a "growing" trend toward public concern over assumed safe practices of natural forests and BLM management where water quality and health is at stake. Your mitigative measure no. 7 could turn out to be a bigger adverse impact unless you leave more areas unsprayed than you planned.

Sincerely,

Ron C. Barber R-5

Response to Letter No. 12

12-1 Any increase in grazing levels would be the result of vegetative increases through controlled burning, spraying, etc., of overmature rangelands where productivity is suppressed. These treatments would be conducted in a manner beneficial to wildlife resources while extensive protection measures are implemented to insure protection of riparian and meadow habitats.

NORTHEAST CALIFORNIANS FOR WILDERNESS

P.O. Box 391
Susanville, CA 96130

#13

July 13, 1983

District Manager
Bureau of Land Management
P.O. Box 1090
Susanville, California 96130

Please consider the following comments on the draft Alturas Resource Area Management Plan and Environmental Impact Statement.

Your District had the opportunity to recommend for wilderness three different wilderness areas for a total of 32, 855 acres. Instead, the District chose only one-half of one area for 5775 acres. This is only 18% of the eligible area. Furthermore, even inside that small 5775 acres it appears (p. 2-26) that "business as usual" is planned: increase authorized livestock, under conditions restore suspended non-use, increase season of use in one area, allow heavy utilization in some areas, not prohibit oil and gas activities, etc. The phrase "partial wilderness designation" (p. 2-27) indeed seems to apply. The wilderness protection is very partial. This is a "balanced alternative?" It tends to confirm that wilderness is treated as an inconvenient resource to be minimized rather than a precious resource to be maximized and enhanced. Essentially, the Plan allows grazing to freely affect wilderness, while wilderness is prohibited from affecting the grazing. Perhaps this can be rethought. Specifically:

13-1

1. The Pit River Canyon wilderness should be bigger. The 5775 acres is too small. To the south are two wildernesses that are acknowledged as too small for overnight wilderness experiences: the 19,080 acre Caribou Wilderness and the 16,335 acre Thousand Lakes Wilderness. Similarly, even the original 11,575 acre Pit River Canyon WSA was "too small" to begin with. Yet BLM's response is to cut it in half to 5775 acres. From bad to worse. BLM should enhance, not diminish, its scarse wilderness resource and recommend the entire 11,575 acres as wilderness. The "buffer zone" will give valuable protection and improvement to all wilderness resources and experiences.

13-2

2. The grazing regime (p. 2-26) should be modified to maintain or decrease present livestock use, not increase it. Wilderness, watershed, recreation, wildlife, undisturbed vegetation, cultural resources, and the integrity of the envoirnment should get first priority, not grazing.

3. On the positive side, the proposals to acquire private inholdings are commendable. Efforts should be expanded, however, to aquire private land in and around the entire 11,575 acre unit, not just the 5775 acre unit.

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5-73

13-3 4. Disposal study on the East Warner MA 11 parcels is a bad idea and should be terminated. Several of these asrea abut the S Warners Wilderness and clearly should remain in public hands.

In summary, wilderness is a precious non-renewable resource. With so little left, it seems that to recommend such a minimal amount, and subject it to increased grazing, does not make for a "balanced alternative." Hopefully, you will reconsider it.

Sincerely,

Carl H. Schwarzenberg

Carl Schwarzenberg, for

NORTHEAST CALIFORNIANS
FOR WILDERNESS

P. O. Box 391
Susanville, CA 96130

Response to Letter No. 13

13-1 Acreage recommended for wilderness in Pit River Canyon has been increased to 6,640 acres. See the Preferred Alternative and Wilderness Management Rationale, pages 2-45 to 2-48.

Livestock management would be governed by departmental Wilderness Management Policy which states, "It is anticipated that the numbers of livestock permitted to graze in wilderness would remain at the approximate levels existing at the time an area enters the wilderness system." Increases in livestock grazing levels would be incidental, dependent upon determinations of available forage through monitoring or improved distribution through better range management. Heavy utilization could occur in River Pasture when incorporated with the adjacent Bald Mountain Allotment into a grazing system providing rest. Increase in season of use would occur in response to delayed turnout due to weather, range readiness, etc., to provide flexibility in the grazing season. Oil and gas leasing would continue, though there are no current leases, subject to departmental Wilderness Management Policy which states that the lease must contain reasonable stipulations for the protection of wilderness resources.

13-2 The extent of the original WSA or roadless area as delineated in the wilderness inventory was defined by the presence of roads, railroads, and private lands. The wilderness recommendation for Pit River Canyon is now 6,640 acres. See rationale for the Preferred Alternative in Chapter 2, Alternatives, for discussion of boundaries of the proposed wilderness, and Chapter 3, Affected Environment, for detailed discussion of wilderness resources in Pit River Canyon.

13-3 Proposed acreage for disposal in MA 11 has been reduced to 120 acres. See Chapter 2, Alternatives, page 2-37, and Preferred Alternative, page 2-45.

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#14

THE WILDERNESS SOCIETY

FOUNDED IN 1935

July 8, 1983

Mr. C. Rex Cleary
Susanville BLM District
PO Box 1090
Susanville, CA 96130

Dear Mr. Cleary,

The Draft Resource Management Plan and Environmental Impact Statement for the Alturas Resource Area is seriously flawed in several ways. In general, we are concerned that the thrust of the evaluation and the proposed alternative is not equitable, but rather gives precedence to timber, grazing, and multiple use development over conservation of resources. Specifically, we wish to object to several provisions in the proposed alternative II.

The alternative recommended in the report would eliminate the East Warners WSA as non-suitable for further wilderness consideration. This recommendation has been made even though the parcels are contiguous to the South Warner Wilderness, contain sensitive plant species, and complete an ecological wilderness unit. We strongly object to the loss of this WSA, and support wilderness designation for all the parcels.

The Tule Mountain WSA is also completely eliminated in the proposed alternative. We believe this large WSA is important, due to its proximity to two large population centers and its natural values, and strongly object to the WSA being recommended as non-suitable for wilderness.

14-1

The Pit River WSA is a prime wilderness candidate, and we are deeply concerned that the proposed alternative advocates eliminating 5,775 acres of the canyon from wilderness consideration -- particularly since nearly 4,000 acres has already been dropped from the 1978 inventory recommendation. Not only does this WSA amply satisfy FLPMA requirements that wilderness areas be accessable to significant population centers, but the river and canyon provide important habitat for raptors and wildlife, offer excellent recreation, and contain archeological sites. Half of the Pit River Canyon area is being recommended for wilderness designation in alternative II; it is illogical and environmentally unsound not to recognize the integrity of the entire Canyon ecosystem as a protected wilderness area.

Alternative II does not provide complete and enforceable protection of archeological sites, endangered plants, raptor nesting habitat, and riparian areas threatened by mining, logging, and fuel-gathering. Increased grazing time and allotments may threaten riparian and land quality, and fencing and water impoundments required by the proposed alternative will be costly for the tax-payer.

14-2

5-76
278 POST STREET, #400, SAN FRANCISCO, CA 94108
(415) 982-~~2975~~ 2195

We support alternative III, maximum protection, and strongly urge more balance between the need for vigorous protection of fragile and irreplaceable wilderness lands and the demands of development and multiple use.

Sincerely,

Patricia Hedge

Patricia Hedge
Regional Director, California-Nevada

Response to Letter No. 14

14-1 See Chapter 2, Wilderness Management Rationale, page 2-46, for decisions on wilderness recommendations.

14-2 See response to comments 9-1 and 9-2.

California Wilderness Coalition

POST OFFICE BOX 429 • DAVIS, CALIFORNIA 95616 • (916) 758-0380

#15

July 11, 1983

C. Rex Cleary, District Manager
Bureau of Land Management
P.O. Box 1090
Susanville, CA 96130

Dear Rex:

The California Wilderness Coalition is pleased to have this opportunity to comment on the Resource Management Plan and Environmental Impact Statement (EIS) for the Alturas Planning Area.

On the whole, we are quite disappointed with the EIS sent for review. There is very little information given about wildlife, wilderness, and plant resources. The range of alternatives is quite narrow and heavily slanted towards increased grazing. It is clear that the cow comes before all other resources in the Alturas Resource Area.

We always are surprised to see the labels used by the Bureau of Land Management on their alternatives. The choices - "Maxamized Production," "Balanced," and "Maximized Protection" are very misleading. If anything, Alternative III is a "balanced" alternative. If you were really proposing to maximize protection, there would be an alternative with no grazing, no timber harvesting, no off-road vehicles, and especially no sales of public lands. The spectrum of management alternatives is much broader than those offered in the EIS.

The California Wilderness Coalition's specific comments on the management plan and EIS are as follows:

RANGE

With more than 60 percent of the surveyed range in poor or fair condition, we cannot understand how the Bureau of Land Management can propose **increasing** grazing in most of their management areas.

15-1 The proposed alternative calls for vegetation treatment to increase the quantity of livestock forage, but just what this treatment is and its environmental impacts are not discussed in the EIS. Merely mentioning that some areas will be treated by prescribed burn or aerial spray application does not allow the reader to determine the impact of these proposed actions.

WILDLIFE

The authors of the EIS seem to confuse "wildlife" with "game species." While the discussions of mule deer, pronghorn, and sage grouse are useful, our experience in the Alturas Planning Area shows there to be quite a variety of wildlife present. Only one sentence mentions the approximately 225 species of birds and numerous mammals,

15-2 reptiles, and amphibians that bring the total wildlife species count to over 300. The EIS must analyze the impact of the proposed actions on more than just a few game species. This is especially true since there are endangered southern bald eagles in the area and other sensitive species like Swainson's hawk.

It appears that the proposed action will be disastrous for many of the three hundred species of wildlife in various parts of the resource area. The EIS should

specifically state what these impacts will be, what the loss of wildlife will be, and if mitigation measures are possible. Clearly, the cost of maintaining and increasing grazing will be a major change in the ecologic diversity of the resource area.

TIMBER

15-3 With less than two percent of the resource area supporting marginally commercial timber, the California Wilderness Coalition suspects that the costs of timber sale preparation, road construction, and reforestation will far exceed any money received from timber sales. We feel the EIS should address this issue as well as the impacts of logging the relatively small forests on wildlife, soils, rare plants, etc.

WILDERNESS

We trust that this EIS for the Resource Area is not intended to comply with the requirements of Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA) for a complete wilderness study and EIS for the Wilderness Study Areas (WSA) present. The EIS is not adequate even for the Resource Managemen Plan, and it certainly does not begin to consider the wilderness alternatives for the three WSAs in the area.

The California Wilderness Coalition strongly opposes the preliminary wilderness recommendations of the Bureau of Land Management in the Alturas Resource Area.

We feel that a Pit River Canyon Wilderness of about 15,000 acres should be recommended as suitable (the existing WSA along with lands erroneously dropped during the intensive wilderness inventory). The entire Tule Mountain WSA of 16,950 acres also should be recommended as suitable, along with the 4,000 acres of public land adjacent to the exisiting South Warner Wilderness.

The proposed alternative does propose a small wilderness for the Pit River Canyon, but this proposal would protect just the canyon itself without any of the surrounding lands. Additional diversity, special features, wildlife, and plant communities would be preserved by adding the remainder of the WSA and additional lands to the north.

The Tule Mountain WSA is a large area of vegetation types not represented in Calfornia's portion of the National Wilderness Preservation System. We were not aware that the Wilderness Act of 1964 or FLMPA requires a "high quality" wilderness area (EIS, page 3-35), or just exactly what a "high quality" wilderness area is.

15-4 The wilderness management rationale in the EIS is that Tule Mountain is being recommended as nonsuitable because it does not add to the diversity of the National Wilderness Preservation System. What similar areas are in the wilderness system? It also is stated that private inholdings and numerous ways make manageability very difficult; less than six percent of the land is private, and a partial wilderness alternative could mitigate part of this problem. Perhaps the most incredible rationale offered is the commercial timber. Only 105 acres of white fir and Jeffrey pine, which are found at the top of Tule Mountain could be considered commercial, along with just 46 acres that requires timber site planting. This minuscule amount of timber land, less than one percent of the WSA, is surely uneconomical to manage as commercial timber.

With virtually no mineral or timber resources in the WSA, there does not seem to be any basis for the nonsuitable recommendation by the Bureau of Land Management. "Decadent browse" can be managed through prescribed burning, and the range can be improved through wilderness management.

We are quite confused about the Bureau of Land Management's plan for the East Warners. On page 2-39 of the EIS it is stated that these lands contiguous to the South Warner Wilderness were considered nonsuitable, but on page 3-37 it says that decisions for this management area will be incorporated into the Cowhead/Massacre Management

Framework Plan. Why isn't the decision deferred until the Cowhead/Massacre plan is reconsidered?

LAND SALES

15-5 The California Wilderness Coalition completely opposes the proposal to sell portions of the Alturas Resource Area. With the significant amount of private inholdings throughout the area, the best use of these tracts would be for exchange to make the remaining public lands more manageable. Also, no lands with important wildlife or plant habitat should be sold.

The proposal to sell parts of the East Warners WSA is unconscionable, not to mention illegal.

CONCLUSION

Aside from the California Wilderness Coalition's objections to the decisions proposed in the Alturas Resource Area Resource Management Plan, the Environmental Impact Statement is wholly inadequate. The EIS fails to be site specific, ignores potential impacts, and fails to address many issues, especially wildlife.

The management plan completely fails to adequately consider the Wilderness Study Areas in the resource area. An EIS for the WSAs requires much more detailed discussions of the affected environment, evaluations of wilderness values and manageability, environmental consequences, and a full range of alternatives. This EIS does not begin to address these issues.

Sincerely,

Jim Eaton

Jim Eaton
Executive Director

Response to Letter No. 15

15-1 Grazing authorization decisions as described within the alternatives would not be made until sufficient data is available to ensure that these decisions are supportable. See response 3-1. Chapter 3, page 3-2, has also been revised to explain the comparison of ecological range condition and forage condition.

The document has been revised to show (Chapter 2, Alternative Table 2-1) the acreage and type of vegetative treatments proposed. Pages 2-53 to 2-55 further explain the general types of vegetative treatment that would be completed in the identified areas. Revisions to Chapter 4 describe environmental effects as a result of these actions.

15-2 See response to comment 11-3 for an explanation of wildlife species identified as issues within the EIS.

15-3 See response to comments 1-4 and 1-5. See Social and Economic Conditions on page 3-22 and Table 4-1, Socioeconomic Impacts Area Wide, page 4-57.

15-4 See Wilderness Management Rationale, pages 2-46 to 2-48.

15-5 See Preferred Alternative, page 2-45.

10 July 1983

#16

BUREAU OF LAND MANAGMENT
Susanville District - Alturas Resource Area

As landowners bordering the Pit River Canyon W.S.A., we request the final northern wilderness boundary be at the north rim of the Pit River Canyon. We feel a non-wilderness buffer between the canyon rim and private land (Breeding Field, Sec. 11, Collett Lake, Sec. 12, Middle Lake, Sec. 7, Muck Valley, Sec. 32 and 33.) will serve the interests of both areas.

We request the upstream wilderness boundary not be further north than the private land on Section 3. This will prevent land-locking (by wilderness) the private land in Section 27, 34, and 3.

16-1

We request the downstream wilderness boundary not be further north than the mouth of the canyon in Section 4. The circular elevation line is north of the mouth at the canyon. Beyond this point is a gravity irrigation system serving private land in Section 10.

We feel these boundaries will consolidate agricultural activities around the private lands and seperate wilderness activities to Pit River Canyon.

16-2

We are interested in granting access to the wilderness area through our land in Section 27 and 34, however, it would not be in our best interest to grant this access until the boundary of the Pit River Wilderness reflecting the above requests is approved by Congress.

Yours truly,

Thomas J. Vestal
June B. Vestal

Thomas J. Vestal
June B. Vestal

Response to Letter No. 16

16-1 Your comments have been considered. Refer to the Preferred Alternative, Wilderness Management Rationale, pages 2-46 to 2-48.

16-2 We look forward to working on access into the Pit River Canyon following final Congressional approval of the proposed wilderness designation.

July 12, 1983

#17

Bureau of Land Managment
Alturas, Ca.

Attention: Richard Drehobl

Dear Mr. Drehobl,

We, Dahle Bros., are land owners owning land in the middle of the proposed Pit River Canyon Wilderness Area.

17-1 The North wilderness boundry should run from the South West corner of our property in Section 3 to the South West boundary of the wilderness area in 4, including a strip approximately 3/8 mile wide from center line of Pit River on the North rim. This line could follow elevations and other land marks wherever possible. This will allow access to our land in Muck Valley for agricultural operations and minimize visual impact between agriculture and wilderness along the whole North boundary.

With our interest in land in Section 3, 34, and 27, we are prepared to grant easements for access to the proposed Wilderness Area.

17-2 We are interested in trading our land located in Section 9 and 16 in the Pit River Canyon WSA for other BLM lands in the Muck Valley area which would be beneficial to our holdings in Muck Valley. We do not wish to initiate such a trade or grant easements until the issue of establishing the boundary of the suitable wilderness area is resolved by Congress.

We do not want to be land-locked by the Wilderness Area and therefore suggest the wilderness boundary not be further North than the Southern extent of the private land in Section 3.

Sincerely,
Dahle Bros.
By Gary Dahle

Response to Letter No. 17

17-1 Your comments have been considered. Refer to the Preferred Alternative, Wilderness Management Rationale, pages 2-46 to 2-48.

17-2 We look forward to working on a possible exchange to acquire lands within the WSA boundary, as identified in the plan, and the possibility of access across your property to the wilderness boundary following final Congressional approval of the proposed wilderness designation.

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
Modoc National Forest
P.O. Box 611
Alturas, California 96101

#18

1920

JUL 12 1983

Bureau of Land Management
C/O Rich Drehobl
Alturas Resource Area
P.O. Box 771
Alturas, CA. 96101

Dear Rich,

Following are comments received from Modoc National Forest Personnel on your Draft EIS and RMP for the Alturas Resource Area.

1. District Ranger, Devil's Garden - Could see no conflicts between BLM preferred alternative and FS management objectives.

2. Forest Archeologist - "Basically, all alternatives must continue protection of cultural resource values as provided by law - anything less would not be legal".

18-1

3. Asst. Forest FMO - "The vegetation on a large portion of BLM lands in the Alturas Resource Area is dependent on fire to maintain an ecological balance. The BLM has recognized this in recent years and has become fairly active in vegetation management through the use of fire management. Therefore, it concerns me that this important management program is not mentioned in the DEIS".

If there are any other comments forthcoming, they will be forwarded to you immediately.

Sincerely,

Nancy Gardner
for GLENN BRADLEY
Forest Supervisor

Response to Letter No. 18

18-1 The document has been revised to specifically address vegetation treatments within the Planning Area. Within the Preferred Alternative, 54,640 acres have been identified for prescribed burn. General burn and seed, and burn and release techniques are described on pages 2-54 and 2-55 of Chapter 2.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

#19

Mr. C. Rex Cleary, District Manager
Susanville District Office
Bureau of Land Management
P.O. Box 1090
Susanville, California 96130

JUL 13 1983

Dear Mr. Cleary:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) titled ALTURAS RESOURCE MANAGEMENT PLAN; LASSEN AND MODOC COUNTIES, CALIFORNIA. We have no comments on this DEIS.

We have classified this DEIS as Category LO-1. Definitions of the categories are provided by the enclosure. The classification and date of EPA's comments will be published in the Federal Register in accordance with our public disclosure responsibilities under Section 309 of the Clean Air Act.

We appreciate the opportunity to review this DEIS. Please send two copies of the Final Environmental Impact Statement to this office at the same time it is officially filed with our Washington, D.C. office. If you have any questions, please contact Loretta Kahn Barsamian, Chief, EIS Review Section, at (415) 974-8188 or FTS 454-8188.

Sincerely yours,

Charles W. Murray, Jr,
Assistant Regional Administrator
for Policy, Technical and
Resources Management

Enclosure (1)

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ROGER V. BARTH
JOSEPH E. SCHULER
NANCY A. MURRAY

OF COUNSEL
MARIO T. NOTO
EDWARD J. BELLEN
FRANKFURT, WEST GERMANY

#20

July 11, 1983

C. Rex Cleary
District Manager
Bureau of Land Management
P.O. Box 1090
Susanville, California 96130

re: Alturas Resource Management Plan/Environment Impact Statement

Dear Mr. Cleary:

I am writing on behalf of the American Horse Protection Association, Inc., to comment on the Draft Alturas Resource Management Plan and EIS.

20-1 Because the draft contains so little information on wild horses, it is difficult to comment in a more than a superficial manner. All of the alternatives contemplate providing enough forage for the existing herd of 150 horses and burros that spends part of its time in the Strip Allotment (Table 2-1, p. 2-10). The draft also states that "target numbers for the herd have not yet been reached" (p. 3-24).

20-2 It was unclear to me whether that means that an appropriate management level has not been established in the Devil's Garden Plateau Herd Management Plan, or whether the population has not yet increased to the point at which removals are necessary. If it is the former, the draft may be setting an arbitrary and unnecessary ceiling on the wild horse and burro population. If it is the latter, the draft should be rewritten to reserve enough forage for the maximum population that will reside in the Strip Allotment pursuant to the Herd Management Plan. Furthermore, the draft should allow for upward flexibility in wild horse and burro numbers as range conditions improve over the long term.

AHPA requests that these points be addressed and clarified in the final EIS.

Very truly yours,

Russell J. Gaspar
Attorney for American
Horse Protection Association, Inc.

cc: Joan R. Blue
RJG:af

Response to Letter No. 20

20-1 The existing herd consists of several hundred animals in excess of the target level of 150 horses and burros. On page 3-9 it states that "One herd of more than 150 wild horses and burros, part of the East Herd Unit, resides in the Strip allotment.

20-2 The population is now in the process of being reduced to the 150 head target level. The Preferred Alternative proposes to accept that level presented in the Devils Garden Herd Management Plan developed by the Modoc National Forest Service in coordination with BLM.

AtlanticRichfieldCompany 555 Seventeenth Street
Denver, Colorado 80217
Telephone 303 575 7577

J. R. Mitchell
Public Lands Coordinator

July 13, 1983

#21

Mr. C. Rex Cleary
District Manager
Bureau of Land Management
P.O. Box 1090
Susanville, California 96130

RE: Draft Alturas RMP and EIS

Dear Mr. Cleary:

Atlantic Richfield Company appreciates having the opportunity to provide comments to the Bureau of Land Management (BLM) regarding the draft Resource Management Plan (RMP) for the Alturas Resource Area, Lassen and Modoc Counties, California.

We concur in the Bureau's preliminary recommendation that the Tule Mountain and East Warners areas are nonsuitable for wilderness designation because of manageability problems and their potential for oil and gas development. Because locations within the planning area harbor potential for the occurrence of several industrial and metallic minerals, it is important that such lands remain open to all mineral appropriation. In addition, Pit River Canyon may have oil/gas potential. This portion of northeastern California is presently under study by our Company to locate areas of Cretaceous marine sedimentation which have been covered with volcanics ranging in age from Miocene to Recent. The BLM should make certain that its case-by-case use of permanent and seasonal plant and wildlife stipulations does not effectively preclude resource development. Such BLM action will help ensure future accessibility and utilization of the area's energy and mineral resources.

Thank you for the opportunity to provide these comments.

Sincerely,

Jay R. Mitchell

J.R. Mitchell

JRM:JFO:drm

Response to Letter 21

Thank you for this information.

CALIFORNIA CATTLEMEN'S ASSOCIATION

H. CLAY DAULTON
PRESIDENT
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#22

VICE PRESIDENTS
JIM TIMMONS
ARCATA
STUART BROWN
GUSTINE
MYRON OPENSHAW
OROVILLE

NCA
NATIONAL CATTLEMEN'S ASSOCIATION

July 19, 1983

Rich Drehobl, Area Manager
Bureau of Land Management
P.O. Box 771
Alturas, CA 96101

Dear Mr. Drehobl:

22-1 The CCA would like to go on record in support of the recommendation from the Fall River-Big Valley Cattlemen's Association that the proposed Pit River Canyon Wilderness area be confined to the Pit River Canyon and Horse Creek Canyon. We respectfully request that the surrounding tablelands and other elevations above the rim of these canyons be excluded from the wilderness area boundary.

Any expansion of this proposed wilderness area into adjacent grazing areas would be detrimental to the agricultural economy of the area and make management of the wilderness area much more difficult and expensive.

Cattle theft is a major problem along isolated roads throughout this region and for this reason we would urge that the BLM choose access road locations that will minimize public exposure to areas frequented by cattle grazing.

Sincerely,

Wm. B. Staiger

Wm. B. Staiger
Executive Vice President

cc: Ed Hastey
Ted Crum
Steve Albaugh
Tom Vestal
Phillip Lord

ldc

Response to Letter No. 22

22-1 Your comments have been considered. Refer to the Preferred Alternative, Wilderness Management Rationale, pages 2-46 to 2-48.

FALL RIVER - BIG VALLEY CATTLEMEN'S ASSOCIATION
Post Office Box 66,
McArthur, CA 96056

#23

July 14, 1983

Rich Drehobl, Area Manager
Bureau of Land Management
P. O. Box 771
Alturas, California 96101

Dear Mr. Drehobl:

Attached is a copy of our October 14, 1982, letter addressed to your office. Our members have ranches on all sides of the proposed Pit River Canyon Wilderness. We reaffirm our recommendation that the wilderness area be restricted to Pit River and Horse Creek Canyon as much as possible.

The proposed wilderness area should be evaluated on the basis of the two canyons themselves. We feel that the proposed wilderness area boundaries should include very little of the surrounding tablelands and elevations so nearby private and public land can continue to be used in a productive manner. Further, clearly defined boundaries near the canyon rim will enable more efficient and economical enforcement of wilderness regulations by BLM. 23-1

We want to see the BLM minimize conflicts between wilderness and production interests in the proposed wilderness area. This can be best accomplished by not including in the wilderness area: 1) land with established irrigation systems, 2) areas where access to private land is reduced, and 3) large grazing areas.

Cattle theft is a major problem along isolated roads in this area. We would like the BLM to choose access road locations that minimize public exposure to areas frequented by grazing cattle.

Please send me a copy of the draft document when it is complete.

Sincerely,

Ted Crum
President

cc: Bill Staiger

Response to Letter No. 23

23-1 Your comments have been considered. Refer to the Preferred Alternative, Wilderness Management Rationale, pages 2-46 to 2-48.

PACIFIC GAS AND ELECTRIC COMPANY

PG&E 77 BEALE STREET • SAN FRANCISCO, CALIFORNIA 94106 • (415) 781-4211 • TWX 910-372-6587

J. W. PAGE
MANAGER
LAND DEPARTMENT

#24

July 12, 1983

Bureau of Land Management
Draft Alturas RMP/EIS
File: 025.35

Richard Drehobl
Area Manager
Alturas Resource Area
Bureau of Land Management
P. O. Box 771
Alturas, California 96101

Dear Mr. Drehobl:

Pacific Gas and Electric Company has reviewed the draft Resource Management Plan for the Alturas Resource Area and offers the following response.

A portion of one of the corridors we are examining in the Trans-Sierra Intertie Feasibility Study may overlap the proposed Pit River Canyon Wilderness Area in the vicinity of Little Valley. We are aware of the proposed Wilderness Area and will address it in our corridor study. At this stage, however, we cannot determine whether we will need to or be able to make any adjustments.

24-1 Any area which is more extensive than what is indicated by the hatched area of Map 3-5 could foreclose our options to use this corridor. This corridor could be needed in the future to meet California's energy needs. We therefore encourage the Bureau of Land Management to designate it as a planning corridor for future transmission use. On the attached map we have shown the portion of this study corridor which is in the vicinity of the proposed Wilderness Area.

24-2 On the attached map we have also delineated an existing 3-phase 12 kV distribution line which serves the community of Little Valley. Portions of this line appear to be within the proposed Wilderness Area. Our concerns regarding the operation of this line revolve around its continued existence in the present location, proposed limitations on vehicular access within 200 yards of raptor nest sites from April 1 to July 15, and proposed restriction or prohibition of off-highway vehicle use within the Wilderness Area. These restrictions could cause problems in patrolling, maintaining or rebuilding our existing facilities, particularly in emergency situations.

If you would like additional information on either the transmission study corridor or the existing distribution line, please call Ms. Melody Kercheval at (415) 541-5687.

Sincerely,

MRKercheval:sa

Response to Letter No. 24

24-1 The corridor mentioned is constricted from its four mile width to a width of 2.5 miles near Little Valley but it is not eliminated by the proposed wilderness boundary.

24-2 The 12Kv distribution line mentioned does not fall within the area proposed for wilderness designation.

MINERALS
EXPLORATION
COALITION

Minerals Advocate
In Public Policy

12640 West Cedar Drive
P.O. Box 15638
Denver, Colorado 80215
303/989-5567

#25

July 14, 1983

C. Rex Cleary
District Manager
Bureau of Land Management
P.O. Box 1090
Susanville, CA 96130

Dear Sir:

These comments constitute the response of the Minerals Exploration Coalition (MEC) to the Draft Resource Management Plan and Environmental Impact Statement for the Alturas Resource Area. The MEC is a coalition of exploration companies and individuals conducting exploration on federal lands.

In view of the fact that wilderness areas designated after December 31, 1983, will be withdrawn from appropriation under the mining and leasing laws, we believe that all areas with mineral and energy potential should be excluded from wilderness designation, even though no economic deposit is now known. The withdrawal limitations will preclude the collection of new data, and new areas of mineral potential will not be found. With new discoveries effectively stopped, the policy of excluding all currently known mineral potential from wilderness should be followed, so that exploration of these areas will not be restricted and minerals might yet be produced. Explorationists tend to look at the long term because the lead time of discovery may be ten to fifteen years. The impact of wilderness on minerals should be assessed over the long term (a century or more). We believe that land use decisions should be in conformity with the policy statements made in the National Minerals Program Plan and Report to Congress released by the President in April, 1982.

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*W. Glen Zinn**
Englewood, Colorado

**Executive Committee member*

MEC believes the Preferred Alternative (Alternative II, Balanced) adequately recognizes the mineral potential of the area and provides access and flexibility of administration for multiple use management.

The Minerals Exploration Coalition thanks you for the opportunity to comment on this draft resource management plan and environmental impact statement.

Sincerely,

John D. Wells

John D. Wells
President
MINERALS EXPLORATION COALITION

JDW/th

Response to Letter No. 25

Thank you for your comments.

Sierra Club
Mother Lode Chapter

P.O. BOX 1335, SACRAMENTO, CALIFORNIA 95806

#26

TO: C. Rex Cleary
Susanville BLM District
P.O. Box 1090
Susanville, CA 96130

DATE: July 14, 1983

FROM: Stanley A. Weidert
Representing Mother Lode Chapter
Sierra Club

RE: Alturas Resource Area Draft Resource Management Plan and Environmental Impact Statement

General Comments

After reading the proposed resource plan, I am forced to ask if the proposed "balanced" alternative is properly named. The main thrust of the plan seems to be directed towards outlining the procedures needed to eventually establish the maximum amount of grazing for domestic livestock while protecting a minimum level of nonconsumptive amenity resources and the current level of other consumptive resources such as timber and firewood.

The area under consideration in this plan has been significantly altered over the last 100 years with most of the alterations being done to accomodate cattle. The plan states that juniper is an invading species, which is causing loss of forage and browse for cattle and native herbaceous; however, the facts are that juniper was once a dominant natural feature of the majority of the planning area. A ranch owner has shown me pictures of his ranch near Alturas taken in the 1890's, and at that time it was well populated with western juniper. These trees were subsequently removed and the land developed for

26-1

cattle. Now the junipers are returning to those areas where they were removed. This is not an invasion of the juniper but represents the reestablishment of a species into an area where it had previously been a dominant feature, as evidenced by the 1890's photographs.

26-1 Cont.

The removal of juniper and native shrubs, through burning and clearing, and past overgrazing have greatly altered the basic ecology of the resource area and aided the true invasion by imported annual grasses. This major alteration of the ecosystem, plus competition from cattle, has significantly affected the native wildlife populations. The removal of juniper has further affected those species subjected to hunting pressures by reducing cover and increasing their visibility.

26-2

The deer herds in Northeast California are the weakest in the state and much of this problem can be attributed to hunting pressure. Allowing the juniper to reestablish itself in major deer ranges could aid the deer population by providing more needed cover. Such a policy would also be the first step in allowing significant portions of the planning area to return to the original ecosystem, since the junipers and brush are the nursery plants in many instances for native bunch grasses producing eventually the climax plant community of juniper, brush, and bunch grass. For these reasons I support alternative III in the Draft Resource Plan, because it would best provide for the reestablishment of as near natural an ecosystem as is possible, and this would provide the best balance possible between competing resources. Alternative II, with its proposed grazing programs would only continue the past range manipulation practices, that have resulted in the ecosystem degradation and the resulting problems.

The draft plan does not meet NEPA requirements in that it has too few alternatives. A major problem with alternative II is that the significant costs of the proposed programs and actions

will probably not be adequately funded. A fifth alternative should have been prepared that would have addressed this possibility. Such an alternative would provide future direction for BLM employees, if adequate funds do not become available.

Another possible alternative would be one that includes portions of both alternatives II and III. Such an alternative, I feel, would be more balanced than alternative II because it would better reflect the points I have made about the natural ecosystem and could better reflect the cost limitations under current budget cuts.

Wilderness

The Mother Lode Chapter supports full wilderness for both the Pit River Canyon CA-020-103 and Tule Mountain CA-020-211 wilderness study areas. We also disagree with the removal of the East Warners area from consideration as an addition to the existing South Warner Wilderness.

East Warners

26-3 These small adjacent parcels would add to the scientific values of this wilderness by providing more lower elevation life-zone areas to the elevation transect on the east side of the Warner Mountains. These areas at any rate should not be given consideration for selling to private parties because their wilderness consideration is under litigation currently by the Sierra Club Legal Defense Fund. When these areas were removed from wilderness consideration by Secretary Watt we were told that this did not mean that they would be proposed for surplus lands sales but would be kept in the public domain because of their already determined significant values, that were demonstrated by their being considered for wilderness designation. How is it that these parcels can be even considered for sale so soon after

this statement? In addition to the wilderness values the draft plan recognizes that the sale of three of these parcels may have significant impact on the sensitive plant Galium glabrascens ssp. modocense. Since this plant is also recognized in the plan as being used by cattle for food this impact is almost a certainty because of the loss of protection such sales would guarantee. This proposed sale goes totally contrary to the stated goal on page I-5 of "Provide habitats to maintain and enhance the populations of threatened, endangered, and sensitive plants." We, the Mother Lode Chapter, strongly protest this disregard for the scientific and wilderness values of the Fast Warner Wilderness Study Area.

Tule Mountain

We feel that this Wilderness Study Area would provide an excellent area for studying the natural succession pattern discussed earlier. It would also provide a good opportunity for studying a remnant white fir population that is mentioned in the text.

Pit River Canyon

While we are glad to see the recommendation for wilderness for the canyon portion of the Wilderness Study Area, we feel that small size jeopardizes the wilderness values of the canyon and that the reasons for deletion of portions of the summit are inadequate. The existing stock improvements are only small ponds that do not significantly impact the wilderness quality of these areas. In fact, I personally stood at two of them on July 4, 1982, and still felt that I was experiencing a sense of wilderness. None of the ways can be considered roads by the BLM definition and provide good hiking paths that don't cause further environmental impacts. Also, these roads would easily be fenced off to eliminate vehicular intrusions. Such an approach and larger wilderness would provide for better protection for the

raptor aeries and other wildlife values. For these reasons the Mother Lode Chapter, Sierra Club supports a maximum wilderness for the Pit River Canyon.

SMSA's

All wilderness analysis for these three areas should be reevaluated with regards to their service areas. The Redding area was given full SMSA recognition by the Federal Government in January, 1983, because the population of the areas immediately surrounding Redding when combined with its current 45,000 population within the city limits results in more than the 50,000 requirement. Since Redding is recognized as the service area for Shasta, Siskiyou, and Trinity Counties, the 100,000 service population requirement is easily met. At any rate since Congress is due to review BLM wilderness after 1988, the SMSA analysis should be considered based on the fact that Redding will be a service area at that time. Consideration should also be given for the Medford area which should reach SMSA status before 1990.

26-4

I hope these comments will be of value to you in your development of a Final Resource Management Plan for the Alturas Resource Area. Please keep me informed about your progress in these matters. If you have any questions, feel free to contact me.

Sincerely,

Stanley A. Weidert

Stanley A. Weidert
Inwood, Rt. 2, Box 175
Shingletown, CA 96088
(916) 474-3679
Member: Mother Lode Chapter
Executive Committee
Chairman: Shasta Group, MLC

Response to Letter No. 26

26-1 Juniper has probably always been a vegetative component in the Alturas Planning Area, but to a lesser degree than it exists now. In the overstocked condition of much of the Alturas Planning Area, the species virtually excludes the grass and brush component of the vegetative community to the detriment of many species. The comments on the ranch and the photo from the 1890's and the subsequent reestablishment of those junipers seems to support their proclivity toward range expansion and the short-term impacts of juniper removal.

26-2 The comment is in error as to the causes of possible declines in northeast California deer populations. Insufficient cover, which is critical to deer/fawn mortality only in winter, is not cited as a factor in any deer studies in northeast California. Areas with insufficient cover are not utilized by deer. Areas with naturally sparse cover such as the Likely Tables are prohibited from woodcutting to insure this component remains available for wildlife where it occurs.

26-3 The Preferred Alternative, page 2-45, has been revised and the public lands adjacent the east slope of the Warner Mountains would be retained in accordance with the alternative objectives.

26-4 The SMSAs considered in the wilderness analysis in this plan were based on published census data at the time the draft was completed. The wilderness report submitted to Congress will acknowledge potential SMSA status for these areas.

Defenders
OF WILDLIFE

July 14, 1983

#27

Mr. Richard J. Drehobl
Alturas Resource Area Manager
U.S. Bureau of Land Management
Centerville Road, P.O. Box 771
Alturas, CA 96101

Dear Mr. Drehobl:

Defenders of Wildlife submits this letter as our comments and recommendations on your draft plan for the Alturas Resource Area in Modoc and Lassen counties.

27-1 We are generally disappointed with the inadequate wilderness recommendations and the proposal to sell over 20,000 acres of public land. For example, with 32,625 acres of roadless land in the planning unit, BLM is only recommending 5,880 acres of the Pit River Canyon WSA as suitable for wilderness. While we support this modest 5,880-acre wilderness recommendation, we believe that BLM has ignored the magnificent natural values and opportunities for solitude in the remaining roadless lands.

We urge BLM to support additional wilderness protection, and recommend as suitable for wilderness: the entire 11,675-acre Pit River Canyon WSA; the 16,950-acre Tule Mountain WSA; and the 4,000 acres adjacent to the existing South Warner Wilderness. Where grazing occurs, we also wish to reinforce the obvious importance of protecting key riparian habitats.

Thank you very much for considering our views, and please send a copy of the final plan.

Sincerely,

Richard Spotts
California Field Representative
Defenders of Wildlife

5604 Rosedale Way
Sacramento, CA 95822
(916) 442-6386

RS/bc

Response to Letter No. 27

27-1 Revision of the balanced alternative provides for acquisition of 760 acres within the proposed Pit River Canyon wilderness area, page 2-28.

#28

5831 Rosebud Lane, Unit M-1
Sacramento, CA 95841
(916) 338-4540

July 15, 1983

Bureau of Land Management
Alturas Resource Area
PO Box 771
Alturas, CA 96101

Dear Mr. Drehobl,

The Alturas Resource Management Plan has been reviewed and we concur with the preferred management alternative.

We believe all of the major concerns of the resources, local economics and consideration for wilderness study areas have been fully explored and placed in proper balance.

We compliment your office for a job well-done.

Your may consider this letter to be our official response to the environmental statement.

Sincerely,

Ed Dunkley,
Administrator

ED:js

PUBLIC HEARING

REGARDING

PROPOSED WILDERNESS STUDY AREAS OF

TULE MOUNTAIN AND PIT RIVER CANYON

HELD

MONDAY, MAY 23, 1983

AT

7:30 P.M.

IN THE

MCARTHUR LIONS' HALL

IN

MCARTHUR, CALIFORNIA

---000---

BUREAU OF LAND MANAGEMENT

BEFORE

ROBERT FOSTER, HEARING OFFICER

CYNTHIA L. WRIGHT, CSR 4038

MR. FOSTER: LADIES AND GENTLEMEN, THIS PUBLIC HEARING WILL NOW COME TO ORDER.

FIRST, LET ME INTRODUCE MYSELF. I AM BOB FOSTER, BRANCH CHIEF OF LANDS, MINERALS & RECREATION FROM THE NEVADA STATE OFFICE OF THE BLM IN RENO, AND I HAVE BEEN APPOINTED BY THE STATE DIRECTOR FOR BLM IN CALIFORNIA TO ACT AS HEARING OFFICER AND CONDUCT THIS PUBLIC MEETING CONCERNING WILDERNESS STUDY FOR LANDS ADMINISTERED BY THE ALTURAS RESOURCE AREA COVERED BY THE DRAFT ALTURAS RESOURCE MANAGEMENT PLAN.

MOST OF YOU UNDOUBTEDLY SIGNED THE ATTENDANCE SHEET AS YOU CAME INTO THE ROOM. IF YOU HAVE NOT DONE SO, I WOULD LIKE TO ASK YOU TO SIGN IT NOW. IF YOU PLAN TO MAKE A STATEMENT, BE SURE TO CHECK THE APPROPRIATE SPACE ON THE ATTENDANCE SHEET SO WE CAN ADD YOUR NAME TO THE LIST OF SPEAKERS.

THE OFFICIAL REPORTER SEATED TO MY RIGHT IS CYNTHIA WRIGHT. SHE WILL PREPARE A VERBATIM TRANSCRIPT OF EVERYTHING THAT IS SAID IN THIS HEARING. IF YOU WISH TO OBTAIN A COPY OF THE TRANSCRIPT, YOU SHOULD MAKE YOUR OWN ARRANGEMENTS WITH THE REPORTER.

THE PUBLIC HEARING IS BEING HELD TO OBTAIN INFORMATION RELATING TO WILDERNESS STUDY AREAS WHICH HAVE BEEN STUDIED BY THE BUREAU OF LAND MANAGEMENT. A DRAFT ENVIRONMENTAL IMPACT STATEMENT ON THIS SUBJECT HAS BEEN PUBLISHED AND IS AVAILABLE IN THIS ROOM. IN A MOMENT I WILL CALL ON A BLM REPRESENTATIVE TO EXPLAIN BRIEFLY THE FINDINGS OF THE WILDERNESS STUDY.

THE PURPOSE OF THIS HEARING CENTERS ON TWO ISSUES. FIRST, ARE THESE WILDERNESS STUDY AREAS SUITABLE OR NOT SUITABLE FOR DESIGNATION AS WILDERNESS? SECOND, IS THE DRAFT ENVIRONMENTAL IMPACT STATEMENT ADEQUATE?

YOUR COMMENTS AND SUGGESTIONS ON THESE ASPECTS OF THE STUDY WILL BE APPRECIATED.

IN ARRANGING FOR THIS PUBLIC HEARING, NOTICES WERE SENT TO THE UNITED STATES SENATORS ALLAN CRANSTON AND PETE WILSON, TO REPRESENTATIVE NORMAN SHUMWAY, AND TO GOVERNOR GEORGE DEUKMEJIAN. NOTICES WERE ALSO SENT TO FEDERAL, STATE, AND LOCAL GOVERNMENT AGENCIES, ORGANIZATIONS AND INDIVIDUALS KNOWN TO BE INTERESTED IN THIS WILDERNESS STUDY.

NOW, FOR A FEW WORDS ABOUT PROCEDURE. THIS HEARING IS NOT A DEBATE, A TRIAL, OR A QUESTION AND ANSWER SITUATION. IT IS AN ADVISORY HEARING, AND ALL INTERESTED PERSONS MAY PRESENT STATEMENTS, EITHER WRITTEN OR ORAL, OR BOTH, OR OTHER INFORMATION PERTINENT TO THE WILDERNESS STUDY WE ARE CONSIDERING TODAY. THERE WILL BE NO CROSS-EXAMINATION FROM THE AUDIENCE, BUT IF ANYONE FAILS TO UNDERSTAND THE STATEMENT OF ANY SPEAKER, YOU MAY DIRECT A CLARIFYING QUESTION TO ME AND I WILL DETERMINE WHETHER IT IS PERTINENT. THIS WILL GIVE EVERYONE A FAIR AND REASONABLE OPPORTUNITY TO PRESENT HIS OR HER VIEWS.

WHEN I HAVE FINISHED MY OPENING STATEMENT, I WILL CALL ON A BLM REPRESENTATIVE TO EXPLAIN THE BLM'S PROPOSED ACTION. THAT PRESENTATION SHOULD TAKE ABOUT TEN MINUTES; THEN I WILL CALL UPON ANY ELECTED GOVERNMENTAL OFFICIALS PRESENT WHO WISH TO MAKE A STATEMENT. AFTER THAT, WE WILL PROCEED WITH

OTHER SPEAKERS.

ANY WRITTEN STATEMENTS SUBMITTED HERE WILL BE INCLUDED IN FULL IN THE TRANSCRIPT AND WILL BE CONSIDERED ON THE SAME BASIS AS THE ORAL COMMENTS. YOU MAY ALSO SUBMIT WRITTEN COMMENTS UNTIL JULY 14, 1983, AND THESE ALSO WILL BE INCLUDED IN THE HEARING RECORD AND CONSIDERED FULLY. WRITTEN COMMENTS SHOULD BE ADDRESSED TO THE AREA MANAGER, BUREAU OF LAND MANAGEMENT, P.O. BOX 771, ALTURAS, CALIFORNIA 96101.

THE FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976 DIRECTED THE BLM TO CONDUCT A WILDERNESS REVIEW OF CERTAIN PUBLIC LANDS. THE WILDERNESS STUDY AREAS UNDER CONSIDERATION HERE TODAY WERE IDENTIFIED BY THE BLM UNDER CRITERIA SET FORTH IN SECTION 2(C) OF THE WILDERNESS ACT. THE FEDERAL LAND POLICY AND MANAGEMENT ACT DIRECTED THE BLM TO REVIEW SUCH AREAS AND PREPARE RECOMMENDATIONS AS TO WHETHER THE LANDS ARE SUITABLE OR NOT SUITABLE FOR DESIGNATION IN WILDERNESS.

THE LAW REQUIRES THAT A PUBLIC HEARING BE HELD AS PART OF THE STUDY PROCESS. THAT IS WHAT BRINGS US HERE TODAY.

THE BLM HAS COMPLETED THE FIRST PART OF ITS WILDERNESS STUDY, AND HAS PUBLISHED A DRAFT ENVIRONMENTAL IMPACT STATEMENT CONTAINING ITS PRELIMINARY FINDINGS. NOW, IT IS THE PUBLIC'S OPPORTUNITY TO COMMENT ON THE MATTER.

AFTER THE HEARING RECORD CLOSES ON JULY 14, THERE WILL BE A THOROUGH REVIEW OF THE DRAFT EIS. YOUR COMMENTS WILL BE CONSIDERED BY THE BLM STATE DIRECTOR IN MAKING HIS RECOMMENDATIONS TO THE BLM DIRECTOR IN WASHINGTON, WHO MUST MAKE A RECOMMENDATION TO THE SECRETARY OF INTERIOR. AFTER

AFTER DUE CONSIDERATION, THE SECRETARY WILL TRANSMIT HIS RECOMMENDATION TO THE PRESIDENT. THE PRESIDENT, IN TURN, WILL TRANSMIT HIS RECOMMENDATION TO THE CONGRESS. AFTER APPROPRIATE CONSIDERATION, WHICH WILL INCLUDE HEARINGS, THE CONGRESS WILL ACCEPT, REJECT, OR MODIFY THE PRESIDENT'S PROPOSAL. ONLY CONGRESS CAN DESIGNATE AN AREA AS WILDERNESS; AND ONLY CONGRESS CAN RELEASE A BLM WILDERNESS STUDY AREA FROM ITS STUDY STATUS.

AS YOU CAN SEE, THE BLM PRELIMINARY PROPOSAL BEFORE YOU TODAY WILL UNDERGO COMPREHENSIVE REVIEW, AND THIS PUBLIC HEARING AND YOUR VIEWS ARE A VERY IMPORTANT PART OF THAT REVIEW PROCESS.

NOW, I WILL CALL UPON RICHARD DREHOBL, ALTURAS AREA MANAGER OF THE BUREAU OF LAND MANAGEMENT, TO EXPLAIN THE PRELIMINARY FINDINGS OF THE WILDERNESS STUDY TO YOU. BUT FIRST, I WOULD LIKE TO EXPLAIN AGAIN THAT THIS IS NOT AN ADVERSARY PROCEEDING. IF YOU WANT TO ASK A QUESTION IN ORDER TO CLARIFY A CERTAIN POINT, PLEASE FEEL FREE TO DO SO. DIRECT YOUR QUESTION TO ME, AND I WILL DETERMINE WHETHER IT IS PERTINENT.

RICHARD?

MR. DREHOBL: I'LL COVER TWO AREAS, THE FIRST ONE IS TULE MOUNTAIN. THIS WSA LIES FIVE MILES SOUTH OF LIKELY ON THE EAST SIDE OF US 395, ABOUT 25 MILES SOUTH OF ALTURAS. IT CONTAINS 16,950 ACRES OF PUBLIC LANDS AND INCLUDES 1,000 ACRES OF PRIVATE INHOLDINGS. THE WSA BOUNDARY INCLUDES THE PEAKS, SLOPES, AND DRAINAGES ASSOCIATED WITH TULE MOUNTAIN. ELEVATIONS RANGE FROM 4,900 TO 7,100.

THE WILDERNESS CHARACTERISTICS ARE THE SIZE OF THE AREA COMBINED WITH SIGNIFICANT ELEVATION AND OFTEN DENSE VEGETATION PROVIDE FEELING OF SOLITUDE AND ABILITY OF VISITOR TO FIND SECLUSION FROM OTHER VISITORS IN THE AREA. ON THE OTHER HAND, THE VISTAS FROM THREE SIDES OF THE MOUNTAIN INCLUDE SIGNIFICANT PRIVATE DEVELOPMENT, AGRICULTURAL, SMALL TOWNS, RAILROADS, HIGHWAYS, ET CETERA, WHICH MAY DETRACT FROM VISITORS' SUBJECTIVE FEELING OF SOLITUDE.

THIS AREA POSSESSES NO UNCOMMON NATURAL FEATURES PROVIDING OPPORTUNITIES NOT READILY AVAILABLE ON MOST SIMILAR UNITS.

TO MAINTAIN ROADS WHICH ARE IDENTIFIED IN THE INVENTORY PROCESS PENETRATED WSA, ONE FROM THE WEST BOUNDARY AND THE OTHER FROM THE EAST. THESE ROADS PASS WITHIN ONE MILE OF EACH OTHER NEAR THE CENTER OF THE UNIT. IN ADDITION, NUMEROUS VEHICLE ROUTES, IDENTIFIED AS WAYS IN THE INVENTORY, LEAD TO 17 OF THE 24 RESERVOIRS IN THE WSA. THESE ARE ALL MANMADE RESERVOIRS. SEVENTEEN OF THESE RESERVOIRS AND SEVEN OTHER INACCESSIBLE RESERVOIRS WERE BUILT AND MAINTAINED BY TRACKED, CATERPILLAR-TYPE EQUIPMENT. THE ROUTES TRAVERSED BY THIS EQUIPMENT FROM RESERVOIR TO RESERVOIR ARE VISIBLE FROM THE ORIGINAL CONSTRUCTION ON SOME, AND SUBSEQUENT MAINTENANCE ON OTHER EXISTING RESERVOIRS. IN TOTAL, APPROXIMATELY TWENTY MILES OF WAYS EXIST WITHIN THE WSA IN ADDITION TO THE SIX MILES OF ROAD RECOGNIZED IN THE INVENTORY. THESE ROADS AND WAYS REMAIN PASSABLE WITH VIRTUALLY NO CONTINUING MAINTENANCE. THOUGH WHEN APPRAISED INDIVIDUALLY, EACH OF THESE IMPACTS IS SOMEWHAT ABSORBED BY

VEGETATIVE AND TOPOGRAPHIC SCREENING, VIRTUALLY ANY TRANSECT OF THE WSA WOULD ENCOUNTER ONE TO SEVERAL SIGNIFICANT IMPAIRMENTS TO THE NATURAL LANDSCAPE.

IN ASSESSING THE POSSIBLE ALTERNATIVES FOR THE WSA, NO JUSTIFICATION WAS FOUND FOR CONSIDERING A PARTIAL WILDERNESS DESIGNATION, AND THE RESOURCE MANAGEMENT PLAN, ALTERNATIVES I AND II RECOMMENDED THE AREA AS NON-WILDERNESS. ALTERNATIVE III RECOMMENDS THE AREA FOR INCLUSIVE AS WILDERNESS.

THE PREFERRED ALTERNATIVE FOR THIS MANAGEMENT AREA IS ALTERNATIVE II-NON-WILDERNESS.

THIS DECISION WAS BASED ON THE FOLLOWING RATIONALE: NUMBER ONE. THE WSA CONTAINS SIGNIFICANT PRIVATE INHOLDINGS WHICH WOULD COMPLICATE MANAGEMENT.

DO YOU WANT TO POINT THOSE OUT?

PARTICIPANT: THESE.

MR. DREHOBL: SOME OF THESE, AS YOU CAN SEE BY THE BOUNDARIES, ARE NOT COUNTED AS WSA, BUT ARE CONTIGUOUS TO IT.

NUMBER TWO. THERE ARE MANY VEHICLE ROUTES THROUGHOUT THE WSA WHICH ARE NOT RECOGNIZED AS ROADS IN THE WILDERNESS INVENTORY, APPROXIMATELY TWENTY MILES. MOST OF THE 24 RESERVOIRS HAVE ACCESS BY SOME SORT OF ROAD OR WAY. EACH AND EVERY RESERVOIR IS NOT SHOWN ON THIS MAP, BUT YOU CAN GET A GOOD IDEA OF THE TYPE OF DEVELOPMENT THAT WE'RE TALKING ABOUT.

NUMBER THREE. WILDERNESS VALUES ARE NOT UNIQUE IN THIS REGION. THERE ARE OVER 1.6 MILLION ACRES IN THE SAME LANDFORM/ECOTYPE THAT HAVE ALREADY BEEN IDENTIFIED FOR

FURTHER STUDY BY BLM AND U.S. FISH AND WILDLIFE SERVICE IN CALIFORNIA AND NEVADA. THE FOREST SERVICE DOES NOT TARGET THIS ECOTYPE FOR WILDERNESS, SO WE'RE TALKING ABOUT BLM AND U.S. FISH AND WILDLIFE SERVICE.

NUMBER FOUR. THE AREA RECEIVES HEAVY RECREATION USE DURING DEER SEASON. THIS IS A HISTORIC USE WHICH IS VERY UNCONSTRUCTED. CONTROLLING VEHICLE ACCESS DURING THIS TIME WOULD CREATE A VERY DIFFICULT MANAGEMENT PROBLEM, PARTICULARLY CONSIDERING THE PRIVATE LANDS SITUATION WITHIN THE WSA.

NUMBER FIVE. IT WAS FELT THAT MANAGEMENT EMPHASIS SHOULD BE DIRECTED TOWARD RANGE AND WILDLIFE MAINTENANCE AND IMPROVEMENT RATHER THAN SHIFTING AWAY FROM THESE HISTORICAL USES TO PROVIDE A WILDERNESS RESOURCE.

NUMBER SIX. THOUGH SOME MINOR BENEFITS TO WILDLIFE MIGHT BE RECOGNIZED BY CURTAILING VEHICULAR ACCESS, THIS WOULD BE OFFSET BY A WILDERNESS MANAGEMENT POLICY CONTROLLING VEGETATIVE MANIPULATION TO ENHANCE WILDLIFE HABITAT AND BY DETERIORATION OF WATER SOURCES THROUGH LACK OF MAINTENANCE.

NUMBER SEVEN. THE SAME IS TRUE WITH RANGE. IN A STAGNANT TO DECLINING RANGE TREND, SOME VEGETATIVE MANIPULATION AND MAINTENANCE OF FACILITIES IS NECESSARY TO EFFECTIVELY UTILIZE THE RANGE AND TO REALIZE A RETURN ON PUBLIC AND PRIVATE EXPENDITURES WHICH HAVE BEEN MADE TO DATE ON RANGE IMPROVEMENT WITHIN THE WSA.

IN SUMMARY, IT WAS FELT THAT WITH THE EXISTING IMPROVEMENTS, IMPACTS, LACK OF SPECIAL FEATURES, PROBLEMS WITH MANAGEABILITY AND PREFERRED MANAGEMENT EMPHASIS, THE

WSA DID NOT MEET THE INTENT OF THE WILDERNESS ACT, THAT WILDERNESS REGULATIONS WOULD NOT PROVIDE FLEXIBILITY NEEDED FOR PROPER MANAGEMENT OF RANGE, WILDLIFE, AND FORESTRY RESOURCES IN THIS CASE; AND THAT OVERALL, WILDERNESS DESIGNATION WAS NOT THE HIGHEST AND BEST USE OF THE RESOURCES AVAILABLE WITHIN THE WSA.

THE NEXT ONE IS THE PIT RIVER CANYON. THIS WSA IS LOCATED ALONG THE PIT RIVER FROM FIVE MILES SOUTH OF NUBIEBER TO SIX MILES SOUTHEAST OF PIT RIVER -- EXCUSE ME, SOUTHEAST OF PITTVILLE.

PARTICIPANT: THIS IS PITTVILLE RIGHT HERE. IT'S RIGHT UP HERE.

MR. DREHOBL: THE SOUTHERNMOST PORTION REACHES TO THE TOWN OF LITTLE VALLEY ON THE BOTTOM. THERE ARE, THE AREA CONTAINS 11,575 ACRES OF PUBLIC LAND WITH NO PRIVATE INHOLDINGS.

THE PREDOMINANT FEATURE OF THE WSA IS APPROXIMATELY 11 MILES OF THE PIT RIVER CANYON, AND APPROXIMATELY FOUR MILES OF HORSE CREEK. DO YOU WANT TO POINT HORSE CREEK OUT TO THEM?

PARTICIPANT: HERE'S HORSE CREEK.

MR. DREHOBL: AND THE PROMINENT FEATURE THEN, OF COURSE, IT'S A RIVER CANYON ITSELF. IT AVERAGES THREE TO FOUR HUNDRED FEET IN DEPTH WITH EXTREME DEPTHS OF UP TO 750 FEET.

THE WILDERNESS CHARACTERISTICS, THOUGH THIS IS NOT A PARTICULARLY LARGE WSA WHEN COMPARED TO OTHER WSA'S, THE DRAMATIC CANYON TOPOGRAPHY AND DENSE AND VARIED VEGETATION

PROVIDE OUTSTANDING OPPORTUNITIES FOR A VISITOR TO THE AREA TO AVOID SIGHTS, SOUNDS, AND EVIDENCE OF OTHER VISITORS.

THERE ARE MANY OPPORTUNITIES FOR SOLITUDE AND PRIMITIVE AND UNCONFINED TYPES OF RECREATION. QUALITY OPPORTUNITIES FOR FISHING AND WILDLIFE OBSERVATION ARE AVAILABLE THROUGHOUT THE LENGTH OF PIT RIVER CANYON AND HORSE CREEK. HUNTING OPPORTUNITIES FOR DEER, ANTELOPE, AND UPLAND GAME ARE ALSO AVAILABLE.

THERE ARE SEVERAL AREAS IN THE UPLAND PORTIONS OF THE WSA WHERE NATURALNESS HAS BEEN MODERATELY IMPAIRED. EIGHT RESERVOIRS HAVE BEEN BUILT AND MAINTAINED AND HAVE VEHICLE ROUTES FOR ACCESS ON THESE SITES. THE ROADS ARE OUT THERE. THE CANYONS OF PIT RIVER AND HORSE CREEK REMAIN IN AN ENTIRELY PRIMITIVE STATE WITH VIRTUALLY NO MANMADE IMPROVEMENTS.

IN ASSESSING ALL POSSIBLE ALTERNATIVES FOR THIS WSA, THEY FELT THERE WAS ADEQUATE JUSTIFICATION FOR A PARTIAL WILDERNESS ALTERNATIVE CONSIDERING THE DISTINCT BREAK BETWEEN THE CANYON AND UPLAND PORTIONS IN TOPOGRAPHY, RECREATION OPPORTUNITIES, AND NATURAL CONDITION.

THE RESOURCE MANAGEMENT PLAN, ALTERNATIVE I, RECOMMENDS NO WILDERNESS. ALTERNATIVE II, WHICH IS THE PREFERRED ALTERNATIVE, RECOMMENDS DESIGNATING 5,880 ACRES AS WILDERNESS; AND ALTERNATIVE III RECOMMENDS THE ENTIRE AREA FOR WILDERNESS.

THE PREFERRED ALTERNATIVE FOR THIS MANAGEMENT AREA IS ALTERNATIVE II, PARTIAL WILDERNESS FOR THE 5,880 ACRES.

THE DECISION WAS BASED ON THE FOLLOWING RATIONALE: NUMBER ONE. THE CANYON TOPOGRAPHY OF PIT RIVER CANYON AND HORSE CREEK PROVIDE ALL THE DESIRABLE CHARACTERISTICS DEFINED

IN THE WILDERNESS ACT AND FULLY MEET THE INTENT OF THAT LEGISLATION.

NUMBER TWO. THE TOPOGRAPHY AND RELATIVE INACCESSIBILITY OF THE AREA ENSURE THAT THE INTEGRITY OF THE WILDERNESS RESOURCE WILL BE PRESERVED.

NUMBER THREE. UPLAND AREAS PROVIDE MARGINAL WILDERNESS VALUES AWAY FROM THE CANYON RIM, BUT HAVE IMPORTANCE IMMEDIATELY ADJACENT TO IT.

NUMBER FOUR. THE MARGINAL VALUES OF THE UPLAND PORTIONS DO NOT JUSTIFY THE DISRUPTION OF HISTORICAL USE PATTERNS AND PROJECT MAINTENANCE AND DEVELOPMENT IN THIS AREA.

NUMBER FIVE. PRIVATE PARCELS LOCATED WITHIN THE HORSE CREEK DRAINAGE PRECLUDE EFFECTIVE MANAGEMENT NEAR LITTLE VALLEY AND DOWNSTREAM FROM BOB CREEK.

IN SUMMARY, IT WAS FELT THAT THE WSA ENCOMPASSES A MIXTURE OF VALUES AND POTENTIAL USES THAT ARE DEFINED TO A LARGE EXTENT BY TOPOGRAPHY. THE CANYON LANDS POSSESS VERY LITTLE OPPORTUNITY FOR DEVELOPMENT, BUT CONTAIN OUTSTANDING PRIMITIVE VALUES. THE UPLANDS PROVIDE OPPORTUNITIES FOR MULTIPLE USE WHILE PROVIDING GOOD ACCESS TO AND HIKING ROUTES ALONG THE CANYONS.

IN JUDGING THIS MIX OF VALUES, IT WAS FELT THAT A REDUCTION FROM THE ORIGINAL WSA BOUNDARY WAS DESIRABLE AND WOULD IN NO WAY IMPAIR THE WILDERNESS CHARACTERISTICS THE DESIGNATION IS INTENDED TO PROTECT.

THERE IS ANOTHER CRITERIA THAT WE'VE GOT, AND THAT IS THAT THERE IS NO EXISTING WILDERNESS IN THIS ECOTYPE, WHICH IS THE SIERRA FOREST PROVENCE, WESTERN PONDEROSA FOREST. THE

FOREST SERVICE HAS IDENTIFIED TWO AREAS OF THE SAME ECOTYPE FOR FURTHER PLANNING; HOWEVER, NEITHER OF THESE AREAS ARE OF THE CANYON TOPOGRAPHY SUCH AS THE PIT RIVER CANYON.

MR. FOSTER: THANK YOU, RICH.

ARE THERE ANY STATE OR LOCAL ELECTED GOVERNMENT OFFICIALS IN THE AUDIENCE THAT WISH TO SPEAK?

(NO RESPONSE.)

MR. FOSTER: OKAY, I WOULD LIKE TO CALL ON FOR THE FIRST SPEAKER, MR. STAN WEIDERT. MR. WEIDERT?

MR. WEIDERT: I'VE ASKED CURT SPAULDING IF HE WOULD GO FIRST.

MR. FOSTER: OKAY, MR. CURT SPAULDING?

MR. SPAULDING: IS THERE A TIME LIMIT?

MR. FOSTER: NO, AS LONG AS IT'S WITHIN REASON.

MR. SPAULDING: OKAY, I'LL TRY TO STAY WITHIN REASON.

MR. FOSTER: UNDER 30 MINUTES.

MR. SPAULDING: STOP IF YOU CAN'T HEAR ME.

MY NAME IS CURTIS SPAULDING FROM SUSANVILLE SPEAKING AS A PRIVATE CITIZEN. I'M A RESIDENT OF LASSEN COUNTY. I'M A HIKER AND BACKPACKER, AND I ENJOY WILDLIFE, WATCHING WILDLIFE. I'M A USER OF WILDERNESS AND A SUPPORTER OF WILDERNESS AND A SUPPORTER OF MORE WILDERNESS. I BELIEVE IT'S A NON-RENEWABLE RESOURCE. THEY'RE JUST NOT MAKING ANY MORE, AND I THINK WE NEED ALL WE CAN GET. WILDERNESS USE IS INCREASING PERCENTAGE-WISE.

I'VE VISITED THE PIT RIVER CANYON WILDERNESS STUDY AREA SEVERAL TIMES. I'VE VISITED IT FROM THE NORTH DOWN TO

THE NORTH BANK OF THE RIVER. I'VE VISITED IT FROM THE SOUTH DOWN TO THE SOUTH BANK OF THE RIVER. I'VE VISITED IT FROM THE UPPER END AND VISITED IT FROM THE LOWER END. I HAVE ENJOYED WATCHING GOLDEN EAGLES AND THE PRAIRIE FALCON. I HAVE ENJOYED WATCHING THE PRONGHORN ANTELOPE ON THE NORTH RIM ON THE NORTH EDGE OF THE WILDERNESS STUDY AREA. I HAVE PARTICIPATED IN THE BLM WILDERNESS REVIEW PROCESS SINCE 1979. I HAVE ALSO VISITED SOME OF THE NINE PARCELS THAT COMPRISE THE SOUTH WARNER CONTIGUOUS WITH CA-020-708.

I HAVE TOTALED SOME FIGURES UP. THE TOTAL ALTURAS RESOURCE AREAS IS 407,306 ACRES. THE TOTAL WILDERNESS STUDY AREAS ARE 32,855 ACRES, AND THE TOTAL WILDERNESS RECOMMENDATIONS IN THIS DOCUMENT ARE AROUND 5,800 ACRES, AND THAT 5,800 ACRES IS 18 PERCENT OF THE TOTAL WILDERNESS STUDY AREA ACREAGE, AND THAT 5,800 ACRES IS ONLY 1.4 PERCENT OF THE ENTIRE RESOURCE AREA.

I WOULD LIKE TO COMMEND BLM ON PROPOSING A PIT RIVER CANYON WILDERNESS. THE AREA HAS, I THINK, OUTSTANDING RECREATIONAL OPPORTUNITIES, HAS OUTSTANDING SOLITUDE OPPORTUNITIES. IT HAS OUTSTANDING WILDLIFE RESOURCES. IT HAS OUTSTANDING VEGETATION, NATURAL VEGETATION RESOURCES. IT'S GOT OUTSTANDING CULTURAL RESOURCE VALUES, AND I BELIEVE IT HAS ECONOMIC ADVANTAGES TO THE LOCAL AREA.

HOWEVER, THE PROPOSAL IS A LITTLE ON THE SMALL SIDE IN MY OPINION. IN FACT, IT IS MINIMAL. AS YOU KNOW, THE MINIMUM WILDERNESS ACREAGE IN THE COUNTY IS 5,000 ACRES. THE PIT RIVER IS SUPPOSED TO BE 5,800 ACRES. EXCEPT FOR THE FARALLON ISLAND WILDERNESS AND A WILDERNESS IN NEW HAMPSHIRE,

BLM IS PROPOSING THE SMALLEST FEDERAL WILDERNESS IN THE COUNTRY. THIS, I BELIEVE, IS A DUBIOUS DISTINCTION, AND ONE I WOULDN'T BE TOO PROUD OF. ONLY ONE HALF OF THE ENTIRE INVENTORIED WSA IS PROPOSED FOR WILDERNESS. 5,800 ACRES OUT OF 11,575 ACRES ARE ELIGIBLE.

I DO SERIOUSLY QUESTION THE WHITTLING DOWN OF WSA. I QUESTION THE DELETION OF THE NORTH GULCH AREA AT THE UPPER END OF THE WILDERNESS STUDY AREA, THE LOWER PIT, THE AREA THAT'S DELETED FROM THE LOWER END WHERE THE LOWER -- THERE THE PIT RIVER LEAVES THE LOWER END OF THE WSA. I ALSO QUESTION THE DELETION OF THE CLARK VALLEY AREA AND THE DELETION OF THE MUCK VALLEY AREA TO THE NORTH.

THE REASONS THAT THE BLM GIVES APPEAR TO BE, QUOTE, MANAGEABILITY, UNQUOTE. BLM FEELS THAT SOME PORTIONS ARE TOO DIFFICULT FOR BLM TO MANAGE. THE PHRASE ON PAGE 2, DASH, 39, OF THIS PLAN OF THE EIS, IS, QUOTE, EXTREMELY DIFFICULT, END QUOTE, TO MANAGE.

I PERSONALLY DO NOT AGREE THAT THE DELETED PORTIONS ARE, QUOTE, EXTREMELY DIFFICULT TO MANAGE, END QUOTE. I WOULD ENCOURAGE RECONSIDERATION OF THIS AREA. I WOULD EXTEND THE WILDERNESS BACK TO THE WSA BOUNDARIES. IN OTHER WORDS, I FAVOR ALTERNATIVE III.

ALONG WITH THIS, I DO FAVOR A CLAUSE IN THE WILDERNESS REPORT AND THE WILDERNESS MANAGEMENT PLAN THAT WOULD ALLOW THE RANGE PERMITTEES WHO GRAZE, THEIR ALLOTMENTS TO CONTINUE, TO HAVE CONTINUED MECHANIZED ACCESS TO THEIR STOCK PONDS AND OTHER RANGE IMPROVEMENTS. THIS HAS BEEN DONE IN OTHER PARTS OF THE COUNTRY WITH THE WILDERNESS STUDY AREAS, AND I THINK

IT COULD BE DONE HERE. AND I THINK IT COULD LEAD TO A SATISFACTORY WIN-WIN SOLUTION FOR EVERYBODY, WHERE EVERYBODY COULD PROFIT.

AGAIN, I INVITE A RETHINKING OF THE ASSUMPTIONS THAT BLM HAS APPEARED TO MAKE, NAMELY, THE FIRST ASSUMPTION THE SMALLER THE WILDERNESS, THE EASIER IT IS TO MANAGE. AND THE OTHER ASSUMPTION THAT ONLY THE CANYON ITSELF HAS WILDERNESS QUALITIES.

IMAGINE IF OUR PREDECESSORS IN LAND MANAGEMENT HAD APPLIED THE SAME PRINCIPALS. IMAGINE THE YOSEMITE NATIONAL PARK AND WILDERNESS ONLY JUST THE YOSEMITE VALLEY AND NONE OF THE SURROUNDING AREA. IMAGINE THE GRAND CANYON NATIONAL PARK AND WILDERNESS WITH JUST A CANYON ITSELF AND NONE OF THE NORTH RIM OR THE SOUTH RIM. IMAGINE THE DEATH VALLEY NATIONAL MONUMENT AND WILDERNESS WITH JUST DEATH VALLEY AND NONE OF THE SURROUNDING AREAS AROUND IT. IMAGINE MT. LASSEN VOLCANIC NATIONAL PARK WITH JUST ONLY THE PEAK ITSELF AND NONE OF THE SURROUNDING TERRAIN. IN OTHER WORDS, THE IMMEDIATE SURROUNDINGS OF A SPECTACULAR NATURAL ATTRACTION IS AN IMPORTANT, INTEGRAL PART OF THE ATTRACTION ITSELF.

HERE IN THE CASE OF THE PIT RIVER, THE UPLANDS SURROUNDING THE CANYON DO PROVIDE IMPORTANCE TO THE VALLEY. THE UPLANDS PROVIDE MORE OPPORTUNITY FOR PRIMITIVE RECREATION. THERE IS MORE AREA TO HAVE FUN IN. THE UPLANDS DO PROVIDE MORE OPPORTUNITIES FOR SOLITUDE. THERE ARE MORE PLACES TO GET LOST IN AND MORE PLACES FOR OTHER VISITORS TO GET LOST FROM YOU, AWAY FROM YOU IN. THE UPLANDS DO PROVIDE A BUFFER ZONE FOR OFF-ROAD VEHICLES, KEEPING THEM AWAY FROM THE CANYON.

THE UPLANDS DO PROVIDE A BUFFER ZONE FOR VANDALS AND OTHERS WHO WOULD DISTURB THE RAPTORS, AND IF PEREGRINE FALCONS ARE REINTRODUCED TO THE PIT RIVER, THIS WOULD BE A VERY IMPORTANT FACTOR.

A BUFFER ZONE ALSO WOULD PROVIDE PROTECTION FROM PEOPLE WHO WOULD VANDALIZE OR STEAL OR DESTROY THE CULTURAL RESOURCES WHICH THIS CANYON IS NOTED FOR. AND A BUFFER ZONE WOULD PROVIDE MORE PROTECTED WILDLIFE HABITAT SUCH AS THE PRONGHORN ANTELOPE, WHICH I ENJOY WATCHING AT THE NORTH END OF THE WILDERNESS STUDY AREA, WHICH IS NOW OUTSIDE OF THE WILDERNESS PROPOSAL.

I AM NOT ALONE IN THESE SENTIMENTS ABOUT EXTENDING THE WILDERNESS BACK TO ITS LARGER SIZE. DURING THE INTENSIVE INVENTORY, MANY, MANY LETTERS OF PUBLIC INPUT WHICH THE BLM REQUESTED CAME IN, AND MANY OF THEM SAID THAT THE 11,500 -- 11,575 ACRES IN THE WILDERNESS STUDY AREA ITSELF WAS TOO SMALL.

NOW, THESE LETTERS ARE ON FILE AT THE BLM SUSANVILLE OFFICE, AND I WOULD ENCOURAGE THE RESOURCE AREA STAFF TO REVIEW THEM BECAUSE YOU HAVE ALREADY GOT A LOT OF PUBLIC INPUT ALREADY IN SIZE TO THIS PUBLIC WILDERNESS AREA, AND I THINK THE SAME LOGIC WOULD APPLY FOR THIS SMALL 5,800 ACRE WILDERNESS PROPOSAL.

APPARENTLY THESE PEOPLE NOT YET HAVE BEEN NOTIFIED, THESE PEOPLE THAT WROTE LETTERS ASKING FOR THE EXTENSION OF THE WILDERNESS AREA. THEY WERE NOT NOTIFIED OF THIS HEARING, OR THIS DOCUMENT, OR THESE DECISIONS THAT YOU PEOPLE ARE MAKING.

I DO FAVOR THE LAND PURCHASE OR EXCHANGE RECOMMENDATIONS IN THE DOCUMENT TO REQUIRE THOSE IMPORTANT BORDERLINE PARCELS THAT THE AREA MANAGER OUTLINED ON THE MAP. I DO FAVOR THE NATIONAL REGISTER ARCHAEOLOGICAL DISTRICT THAT WAS MENTIONED IN THE DOCUMENT FOR THE OUTSTANDING CULTURAL RESOURCE AREAS IN THE CANYON AND AROUND THE CANYON. I ALSO FAVOR SOMETHING I DON'T SEE IN HERE, AND IHAT'S AN ACEC REVIEW, HOPEFULLY A DESIGNATION FOR THE CANYON. ACEC MEANS AREA OF CRITICAL ENVIRONMENTAL CONCERN, AND I THINK PIT RIVER CANYON MEETS MOST OF THE CRITERIA.

I ALSO FAVOR WILD AND SCENIC RIVER STATUS TO THE PIT RIVER IN THIS CANYON IN THIS WILDERNESS AREA. IF ANY RIVER IS WILD, IT'S THE PIT RIVER THROUGH THIS SEGMENT.

ON A RELATED TOPIC, I DO -- ON THE POINT OF THE SOUTH WARNER CONTIGUOUS, THE STUDY AREA WHICH IS IN THE DOCUMENT BUT APPARENTLY NOT ON THE WALL HERE TONIGHT, I DO FAVOR THE SOUTH WARNER WILDERNESS CONTIGUOUS UNIT BEING RECOMMENDED AS WILDERNESS. AND I FAVOR IT BEING ADDED TO THE SOUTH WARNER WILDERNESS EITHER AS FOREST SERVICE LANDS IN THE NEXT ADMINISTRATION, OR AS BLM LANDS IN THIS ADMINISTRATION.

IN ANY CASE, THE SOUTH WARNER WILDERNESS CONTIGUOUS UNIT SHOULD NOT BE SOLD.

IN SUMMARY, I FAVOR ALTERNATIVE III FOR THE PIT RIVER CANYON WILDERNESS. I FAVOR THE RESTORATION OF EXCLUDED AREAS WITH PROVISIONS FOR CONTINUED MOTORIZED ACCESS BY THE GRAZING PERMITTEES. IN SUMMARY, A BIGGER PIT RIVER CANYON WILDERNESS WILL BE A BETTER PIT RIVER WILDERNESS.

THANK YOU.

MR. FOSTER: THANK YOU, MR. SPAULDING.

MR. WEIDERT?

MR. WEIDERT: THANK YOU. MY NAME IS STAN WEIDERT. I LIVE NEAR SHINGLETOWN IN SHASTA COUNTY, ABOUT 30 MILES EAST OF REDDING. I AM CHAIRMAN OF THE SHASTA GROUP SIERRA CLUB WHICH ENCOMPASSES THE NORTHERN END OF THE MOTHERLODE CHAPTER CENTERED IN SACRAMENTO.

I HAVE A DEGREE IN BIOLOGY AND HAVE VISITED THE PIT RIVER CANYON TWICE IN THE LAST TWO YEARS, AND IT HAS REALLY SPARKED MY KEEN INTEREST IN BOTANY AND VARIOUS ECOLOGICAL TYPES OF PLANT COMMUNITIES.

I FOUND IN THE PIT RIVER CANYON AREA THREE DIFFERENT PLANT COMMUNITIES. PLANT GROUPS ARE REPRESENTED IN THE SIERRA-NEVADA FORMS, GREAT BASIN FORMS, AND CASCADE FORMS TO BE FOUND THERE. SOME EXAMPLES ARE THE BRUSH SPECIES OF REDBUD AND SOME OF THE CEANOTHUS SPECIES THAT ARE TYPICAL IN THE SIERRA-NEVADA FOOTHILLS; ALSO THE SAGEBRUSH OF THE GREAT BASIN, AND THEN THE OREGON OAK OF THE CASCADE MIXED IN WITH THESE ALONG WITH THE PONDEROSA PINE WHICH CAN BE FOUND IN PORTIONS OF ALL THREE.

ALSO I HAVE OBSERVED THE PEREGRINE FALCON NESTING -- I MEAN THE PRAIRIE FALCON NESTING IN THE CANYON ALONG WITH OTHER RAPTORS IN THE AREA.

I FEEL THAT THE UNIQUE BIOLOGICAL SITUATION THAT I SEE HERE WOULD BEST BE PROTECTED WITH A MAXIMUM WILDERNESS, THE ENTIRE 11,000-PLUS ACRES WILDERNESS STUDY AREA AS PROPOSED IN ALTERNATIVE III, ALONG WITH A PROVISION THAT ALLOWS THOSE PERMIT HOLDERS FOR GRAZING AND TO PROVIDE

MECHANIZED ACCESS TO THEIR STOCK PONDS AND OTHER FACILITIES.

THERE IS ONE HISTORIC POINT THAT I THINK SHOULD BE POINTED OUT HERE THAT I'M FAMILIAR WITH BECAUSE OF MY FAMILY HISTORY IN CALIFORNIA. AND THAT IS THAT THE PIT RIVER CANYON IN THIS SECTION IS THE REASON FOR THE LASSEN TRAIL TAKING THE ROUTE IT DOES ON THE EAST SIDE OF LASSEN PARK. ORIGINALLY PETER LASSEN, COMING DOWN FROM THE WARNER MOUNTAIN BY THE APPLEGATE TRAIL, PLANNED TO FOLLOW THE PIT RIVER ALL THE WAY TO THE SACRAMENTO VALLEY; HOWEVER, AFTER RUNNING INTO THIS CANYON WHICH IS STILL WILD TODAY, HE DETERMINED IT WOULD BE TOO HARD A TRIP THROUGH THE NARROW AND STEEP-WALLED GORGES TO MAKE; AND THEREFORE, REROUTED THE PARTY TO THE EAST OF THE -- TO THE SOUTH OF BIEBER AND THEN DOWN EAST OF LASSEN BEFORE TURNING TOWARDS HIS RANCH NEAR TEHEMA. AND I FOUND THAT THAT'S VERY INTERESTING, THE CANYON IS STILL THE SAME TODAY AS IT WAS THEN, AND THE BEST WAY TO PROTECT THE CANYON AND BOTH ITS BIOLOGICAL AND HISTORICAL SIGNIFICANCE WOULD BE WITH A MAXIMUM WILDERNESS AREA.

I THINK THE RAPTORS WOULD DEFINITELY BE THE GREATEST BENEFIT ON THE SOUTH SIDE AND THE NORTH SIDE OF THOSE AREAS INCLUDED IN THE WILDERNESS.

THANK YOU.

MR. FOSTER: THANK YOU, MR. WEIDERT.

IS THERE ANYONE ELSE THAT WOULD WISH TO PRESENT ORAL TESTIMONY TONIGHT?

(NO RESPONSE.)

MR. FOSTER: I WOULD LIKE TO THANK YOU FOR

COMING, AND THE BUREAU OF LAND MANAGEMENT APPRECIATES YOUR INTEREST AND THE COMMENTS.

THIS HEARING IS CLOSED.

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REPORTER'S CERTIFICATE

STATE OF CALIFORNIA)
) SS.
COUNTY OF MODOC)

I HEREBY CERTIFY THAT THE FOREGOING TRANSCRIPT CONSISTING OF PAGES 1 THROUGH 21 HEREIN WAS TAKEN BY ME AT THE TIME OF THE PUBLIC HEARING FOR THE WILDERNESS STUDY TAKEN MONDAY, MAY 23, 1983, COMMENCING AT THE HOUR OF 7:30 O'CLOCK P.M., IN ALTURAS, CALIFORNIA, BEFORE ROBERT FOSTER, HEARING OFFICER; AND THAT THE SAME IS A FULL, TRUE, AND CORRECT TRANSCRIPTION OF SAID SHORTHAND NOTES TAKEN BY ME IN CONNECTION HEREWITH.

DATED THIS 3rd DAY OF June, 1983.

Cynthia L Wright

CYNTHIA L. WRIGHT, CSR 4038
CERTIFIED SHORTHAND REPORTER

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Glossary

GLOSSARY

ABBREVIATIONS

AMP	allotment management plan
AMS	Analysis of Management Situation
AUM	animal unit month
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CRMP	Cultural Resource Management Plan
EA	environmental assessment
EIS	environmental impact statement
FLPMA	Federal Land Policy and Management Act
HMP	habitat management plan
IMP	interim management policy
MA	management area
NRHP	National Register of Historic Places
OHV	off-highway vehicle
PA	planning area
RMP	Resource Management Plan
SMSA	Standard Metropolitan Statistical Area
SNU	suspended nonuse (AUMs)
VRM	visual resource management
WSA	wilderness study area

TERMS

ACTIVE PREFERENCE: The current available forage authorized for use on individual grazing permits. Same as Active AUMs. Active preference plus any suspended preference equal total preference.

ACTUAL USE: The amount of livestock use actually grazed.

ALLOTMENT: An area of land where one or more operators graze their livestock. It contains public lands and can include parcels of private or state owned lands. The number of livestock and period of use are stipulated for each allotment. An allotment may consist of several pastures or be only one pasture.

ALLOTMENT MANAGEMENT PLAN (AMP): A livestock grazing management plan dealing with a specific unit of rangeland, and based on multiple-use resource management objectives. The AMP considers livestock grazing in relation to other uses of the range and in relation to renewable resources - watershed, vegetation, and wildlife. An AMP establishes the seasons of use, the number of livestock to be permitted on the range, the range improvements needed, and the grazing system.

ALLOWABLE CUT: The amount of timber that may be harvested annually or periodically from a specified area over a stated period of time in accordance with the objectives of management on a sustained-yield basis.

ANIMAL UNIT: The equivalent of one mature (1,000 lb.) cow or 5 sheep based upon average daily forage consumption of 26 lbs. dry matter per day.

ANIMAL UNIT MONTH (AUM): (1) The amount of feed or forage required by an animal unit for one month (i.e., 800 lbs./month). (2) Tenure of one animal-unit for a period of one month.

ANNUALS: Plants produced from seed which complete their life cycle in one growing season.

ARCHAEOLOGICAL RESOURCES: Sites, areas, structures, objects, or other evidence of prehistoric or historic human activities.

BASE PROPERTY: The ranch or privately owned property that acts as base for the livestock operation providing forage or hay for livestock during the period they are off public rangeland. Grazing preference is tied directly to ownership or control of base property.

BEST MANAGEMENT PRACTICE (BMP): A practice or combination of practices determined by the State and/or area-wide planning agencies, after problem assessment, examination of alternative practices, and appropriate public participation, to be the most effective, practicable means of preventing or reducing pollution generated by non-point sources to a level compatible with water quality standards.

BOARD FOOT (B.F.): A unit of solid wood, one foot square and one inch thick.

BROWSE: The tender shoots, twigs, and leaves of trees and shrubs often used as food by deer, antelope, livestock, and other animals; or to feed or eat on browse.

CARRYING CAPACITY: The maximum stocking rate possible without damaging vegetation or related resources. Carrying capacity may vary from year to year on the same area due to fluctuating forage production caused primarily by differing amounts of precipitation.

CHERRY STEM: Fingerlike intrusions into a WSA which are not themselves part of the WSA (for example, an access road).

CLASS II CULTURAL INVENTORY: A sample oriented field inventory of cultural resources.

CLIMAX: The highest ecological development of a plant community capable of perpetuation under the prevailing climate and soil conditions.

COMMERCIAL FOREST LAND: Forest land that is now producing or is capable of producing at least 20 cubic feet per acre per year of commerical coniferous tree species.

COMMERCIAL THINNING: Removal of merchantable surplus trees.

CRITICAL WILDLIFE HABITAT: That portion of the living area of a wildlife species that is essential to the survival and perpetuation of the species either as individuals or as a population.

CULTURAL RESOURCES: Those fragile and nonrenewable remains of human activity, occupation, or endeavor, which are reflected in district sites, structures, buildings, objects, artifacts, ruins, works of art, architecture or natural features.

CUMULATIVE IMPACT (WILDERNESS): The aggregate impact of existing and proposed activities. Individual intrusions when considered by themselves may not impair wilderness suitability; however, when combined with other existing and proposed substantially unnoticeable impacts, the total effect may be sufficient to impair an area's suitability for preservation as wilderness.

DEPENDENCY: The amount of forage provided by public lands, expressed as a percentage of a herd's total forage requirements for one complete year. The forage requirement is based on the ranch's total herd.

ENDANGERED SPECIES: Any species which is in danger of extinction throughout all or a significant portion of its range.

EPHEMERAL STREAM: A stream which only flows for a short time each year in direct response to precipitation events.

FAWNING AREA: Site specific area utilized by mule deer for parturition.

FORAGE: All browse and herbaceous foods that are available to grazing animals.

FORB: Non-woody herbaceous plants neither grass nor resembling grass.

FOREST DEVELOPMENT: A program of silvicultural treatment to perpetuate and improve production of wood and related values. It includes such treatments as site preparation, seeding, planting, and protective measures.

FOREST LAND: Land that is now, or is capable of becoming, at least 10 percent stocked with forest trees and has not been developed for non-timber use.

FOREST MANAGEMENT PROGRAM: Includes timber activity plan and all forest resource related program activity plans.

GRANDFATHERED USE (WILDERNESS): An authorized use taking place on the land as of the date of FLPMA (October 21, 1976).

GRAZING PERMIT: A document authorizing use of the public lands for the purpose of grazing livestock.

GRAZING SYSTEM: A systematic sequence of grazing use and nonuse of an allotment.

HABITAT: The natural environment of a plant or animal.

HIGH INTENSITY FOREST MANAGEMENT LANDS: All commercial forest land that is part of the timber production base for allowable cut calculation in the SYU-15.

INTENSIVE MANAGEMENT: Management using range improvements and scientific techniques, including grazing systems, to maximize sustained yields of animals and forage production.

INTENSIVE TIMBER MANAGEMENT: The practice of converting an unregulated forest into a maintained and managed forest to approach the desired and optimum level of growing stock as rapidly as possible by such practices as precommercial and commercial thinning, large-scale site preparation, planting, brush and hardwood control, fertilization and forest genetic improvements.

INTERIM MANAGEMENT POLICY: The Bureau's management policy for lands under wilderness review. The policy is to continue resource use on lands under wilderness review in a manner that maintains the area's suitability for preservation as wilderness (referred to as the "Nonimpairment" Standard).

KIDDING GROUND: Site-specific area utilized by pronghorn antelope for parturition.

LEK: (See strutting ground.)

LITHIC SCATTER: The occurrence of flaked stone tools and flakes, from isolates to large dense scatters. Generally, workshop areas sometimes associated with quarries.

MIDDEN SITE: Occupation or village site, usually identified by the presence of a cultural midden, house depressions, rock rings, organic materials, or other cultural artifacts and features.

MILLING STATION: An area containing milling implements such as manos, metates, bedrock mortars, and milling slabs.

MONITORING: Specific studies which evaluate the effectiveness of actions taken toward achieving management objectives.

NATIONAL REGISTER OF HISTORIC PLACES: The official list, established by the Historic Preservation Act of 1966, of the nation's cultural resources worthy of preservation.

NATIONAL REGISTER QUALITY SITE: A cultural resource site eligible for inclusion on the National Register.

NONCOMMERCIAL FOREST LAND: Land which is not capable of yielding at least 20 cubic feet of wood per acre per year of commercial species or land which is capable of producing only noncommercial tree species.

NONFOREST LAND: Land that has been developed for nontimber uses or land that is incapable of being 10 percent stocked with trees.

NONUSE (REGULAR): The authorization by permit to withhold livestock use on the range without loss of preference for future consideration in livestock use of public lands. Expressed in Animal Unit Months.

PERENNIAL: A plant having a life cycle of three or more years.

PERENNIAL STREAM: A stream which flows throughout the year.

PERMITTEE: Holder of a license or permit for grazing of livestock on an allotment.

PETROGLYPH: A figure, design, or indentation carved, abraded, or pecked on a rock.

PICTOGRAPH: A figure or design painted on a rock.

PRECOMMERCIAL THINNING: Removal of surplus trees in a stand before they reach merchantable size.

PREFERENCE: Grazing privileges established following the passage of the Taylor Grazing Act, based on the use of the Federal range during the priority period. The active preference and suspended preference together make up the total grazing preference.

PRIMITIVE AND UNCONFINED RECREATION: Nonmotorized and nondeveloped types of outdoor recreational activities.

PUBLIC LAND: Land administered by the Bureau of Land Management.

QUARRY SITES: Quarry area used by prehistoric/historic peoples.

RANGE CONDITION (ECOLOGICAL): The present state of the vegetation of a range site in relation to the climax (natural potential) plant community for that site. Measured as a percentage of the present plant community that is climax for the range site.

RANGE DEVELOPMENT: Any structure or excavation that facilitates management of range or livestock.

RANGE IMPROVEMENT: Any activity or program on or relating to rangelands which is designed to improve production of forage, change vegetation composition, control patterns of use, provide water, stabilize soil and water conditions, and provide habitat for livestock, wild free-roaming horses and burros, and wildlife. The term includes but is not limited to structures, treatment projects, and use of mechanical means to accomplish the desired result.

RANGELAND SUITABILITY: A measure of an area's ability to be used for livestock grazing using four major criteria (distance to water, degree of slope or other physical barriers, forage production, and watershed condition) which are evaluated independently or in various combinations to arrive at a suitability class.

RANGE SITE: A distinctive kind of rangeland that differs from other kinds of rangeland in its ability to produce a characteristic natural plant community.

RANGE TREND: The direction of change in range condition.

REFORESTATION: Reestablishment of a tree crop on forest land.

REGENERATION: The renewal of a tree crop, by natural or artificial means. Also, the young crop itself.

REST: Removal of grazing on a range area to allow plants to replenish their food reserves. Used in this document to refer to year-long relief from livestock grazing.

RIPARIAN: Situated on or pertaining to the bank of a river, stream, or other body of water. Normally used to refer to the plants of all types that grow rooted in the watertable of streams, ponds, and springs.

ROCK HUNTING BLIND: Rock structure used for hunting by prehistoric peoples.

ROCK RINGS/CIRCLES: Remains of prehistoric structures.

ROCKSHELTER: Any natural shelter between or under standing rocks in which traces of human activity are found.

SCARIFICATION: Disturbance of the upper soil layer by mechanical means in preparing a site for seeding or planting.

SEASON OF USE: That period of time, as designated in planning documents, within which livestock grazing can be authorized.

SENSITIVE PLANT: Those plants which require management consideration under current BLM policy.

SILVICULTURE: The art of producing and tending a forest.

SOIL COMPACTION: The process of increasing the bulk density of the soil through the compression of large voids. Reduction of the air spaces in the soil will result in overland flow of water and surface erosion occurring with less intense storms. Soil compaction can also significantly reduce plant vigor by reducing the gas exchange (CO_2 and O_2) in the root zone, by reducing the transport rate of nutrients through the soil, and by creating a physical impedence to root penetration.

SOLITUDE: (1) The state of being alone or remote from habitations; isolation. (2) A lonely, unfrequented, or secluded place.

STANDARD METROPOLITAN STATISTICAL AREA(SMSA): An area with a population of 100,000 or greater. An SMSA is a county which contains at least one city of 50,000 inhabitants or more plus as many adjacent counties as are metropolitan in character and are socially integrated with that central city or cities.

STOCKING RATE: The number of animals on a specific area at a specific time, usually expressed in acres/AUM.

STRUTTING GROUND: Small, site-specific area utilized by sage grouse in early spring for elaborate, ritualized courtship displays.

SUBSTANTIALLY UNNOTICEABLE: Refers to something that either is so insignificant as to be only a very minor feature of the overall area or is not distinctly recognizable by the average visitor as being manmade or man-caused because of age, weathering, or biological change. An example of the first would be a few minor dams or abandoned mine buildings that are widely scattered over a large area, so that they are in an inconspicious part of the scene. Serious intrusions of this kind, or many of them, may preclude inclusion of the land in a wilderness study area. (See also "Cumulative Impact", above.) An example of the second would be an old juniper control project that has grown up to a natural appearance, the old fallen trees largely decomposed.

SUSPENDED PREFERENCE: That portion of the grazing preference which is placed in a suspended category because the preference exceeds the available livestock grazing capacity. Same as suspended nonuse.

SUSTAINED YIELD: The achievement and maintenance in perpetuity of a high level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use. This term is most commonly associated with forest management and the provisions of an undiminished or "even flow" average annual production of wood fiber over decades. It is also applicable to the management of all renewable

resources including forage, wildlife, water, recreation or any value that can be managed for renewal and sustained productivity. It is dependent on the application of multiple use management in a way that assumes the maintenance of the land's productivity.

SUSTAINED YIELD UNIT (SYU): A geographic area for which an allowable timber cut is determined, providing for continuous, undiminishing flow of timber at a given intensity of management.

TEMPORARY NONRENEWABLE LICENSE: Authorization of livestock grazing on public lands in excess of active preference on a temporary basis in order to make use of excess forage temporarily or make use of excess forage which will be monitored in preparation for increasing active preference.

THREATENED SPECIES: Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

TIMBER MANAGEMENT PLAN: A plan which deals specifically with the implementation of the approved allowable cut.

TIMBER PRODUCTION BASE: Acres included in the calculation of the allowable cut (see high intensity forest management lands).

TIMBER PRODUCTION CAPABILITY CLASSIFICATION (TPCC): A classification system that identifies the commercial forest land base capable of producing timber on a sustained yield basis.

UNNECESSARY OR UNDUE DEGRADATION: Impacts greater than those that would normally be expected from an activity being accomplished in compliance with current standards and regulations and based on sound practices, including use of the best reasonably available technology.

UNSUITABLE RANGE: An area not suited for livestock grazing because of barrenness, lack of forage or water, unstable soils, or physical barriers such as topography, rock, or dense timber. The area may still have value for wildlife.

UTILIZATION: The amount of vegetation or foliage removed from a plant by grazing or browsing animals. Usually expressed as a percent of the plants total annual weight.

VEGETATION TREATMENT: Vegetation treatment for range will be determined on an activity plan basis. At any site, prescribed burning, mechanical brush/ juniper removal, and/or intensive woodcutting or herbicides may be used. Reseeding may be necessary but not in all cases as remnant perennials are available at many sites.

VEGETATION TYPE: A plant community with visually distinguishable characteristics, based upon and named after the apparent dominant plant species.

VISUAL RESOURCE MANAGEMENT (VRM): The planning, design, and implementation of management objectives to provide acceptable levels of visual impacts for all BLM resource management activities.

WATERSHED: The area drained by a principal river or stream system.

WETLANDS: Poorly drained areas, usually having impervious soil, which occur in depressions near the bottom of slopes or on large flats. Wetlands receive water from direct precipitation and overland runoff and may be in contact with the ground water system.

WILDERNESS AREA: (1) An area formally designated by Congress as part of the National Wilderness Preservation System. (2) An area formally designated as part of the State of California's Wilderness Preservation System.

WILDERNESS INVENTORY: An evaluation of the public lands in the form of a written description and map showing those lands that meet the wilderness criteria as established under section 603(a) of FLPMA and section 2(c) of the Wilderness Act, which will be referred to as wilderness study areas (WSAs). See Wilderness Inventory Handbook, dated September 27, 1978.

WILDERNESS NONSUITABILITY: A management recommendation, based on the application of wilderness suitability criteria, that the best use of the resources comprising a Wilderness Study Area would be met without designation of the WSA as a component of the National Wilderness Preservation System, permitting uses which might not necessarily be comparable with wilderness values.

WILDERNESS REPORTING: The process of preparing the report on each wilderness study area and submitting that report to the President and Congress through the Department of the Interior.

WILDERNESS REVIEW PROGRAM: The term used to cover the entire process of wilderness inventory, study, and reporting for the wilderness resource, culminating in recommendations submitted through the Secretary of the Interior and the President to Congress as to the suitability or nonsuitability of each wilderness study area for inclusion in the National Wilderness Preservation System.

WILDERNESS STUDY: The process of analyzing and planning wilderness preservation opportunities along with other resource opportunities within the Bureau's Planning System.

WILDERNESS STUDY AREA (WSA): Roadless areas of 5,000 acres or more and roadless islands of public lands identified as having wilderness characteristics described in the Wilderness Act of 1964.

WILDERNESS SUITABILITY: A management recommendation, based on the application of wilderness suitability criteria, that the best use of the resources comprising a Wilderness Study Area would be designation of the WSA as a component of the National Wilderness Preservation System.

WOODLAND TYPE: Areas with at least a ten percent canopy cover of woody plants, primarily juniper but some oak and pine. Woodlands may provide herbaceous forage in the understory for livestock grazing.

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Appendices

Appendix A

METHODOLOGY FOR DETERMINATION OF RANGE CONDITION

Range condition is defined as the present state of vegetation of a range site in relation to the climax (natural potential) plant community for that site. It is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a plant community resemble that of the climax plant community for the site.

The purpose of determining range condition is to provide a basis for predicting the extent and direction of changes that can result in the plant community because of specific treatment or management.

In the field, the present plant community was described and its quantities by species were estimated as a percentage figure. The percentages were totaled to indicate the community's relationship to the climax or potential for the site. The site and its respective rating could fall between 0 and 100, depending on how closely the plant community resembled the climax plant community for the range site.

Four classes are used to express the degree to which the composition of the present plant community reflects that of the climax:

Range Condition Class	Percent of Present Range Site that is Climax
Poor	0 - 25
Fair	26 - 50
Good	51 - 75
Excellent	76 - 100

Basically, the more diverse a range site is, the higher the condition rating.

Appendix A-2

ADDITIONAL INSTRUCTIONS FOR M, I AND C CATEGORIES

This is additional guidance for placing allotments into M, I, or C categories in the Alturas Planning Area of the Susanville District. It is intended that this, along with professional judgment, be used as an aid in completing the "selective management summary." Additional instructions for each criteria are as follows:

Standard Criteria

Condition:

Consider the general condition of the allotment, not necessarily just ecological range condition. This will include such factors as soil condition and forage production.

Note that ecological range condition does not necessarily relate to forage production. A crested wheatgrass seeding or a burned area would not rate as good condition ecologically; however, these situations could be rated as excellent condition for forage production.

Potential:

The prime consideration here is the potential of an allotment to produce usable forage. If forage is not available or can not be made available, that potential is lacking as far as forage production is concerned.

Major factors to consider are soil (primarily depth) and precipitation. Very shallow soils or areas with low precipitation lack potential.

Potential can be expressed as pounds of vegetation per acre. However, for purposes of rating forage production potential, Surface Acres (SA) per Animal Unit Month (AUM) of usable forage is a much better measuring unit.

The following criteria will be used for placing allotments into categories for productive potential. Note that these are usable AUMs.

High	8 SA/AUM or better
High Moderate	8 SA/AUM to 15 SA/AUM
Low Moderate	15 SA/AUM to 20 SA/AUM
Low	20 SA/AUM or more

The important division is between low and moderate. Allotments that do not have potential to produce usable forage at 20 SA/AUM or better will be placed in C category.

Potential for other resources must also be considered under this heading. However, only that potential affected by grazing will be considered.

Conflicts:

Conflicts considered here must be related to grazing. Some of these could be erosion, wildlife, wild horses, etc.

If grazing is conflicting with something and this conflict can be solved or partly solved through grazing management, then rate it "I."

Economics:

This deals with the amount of economic return from public investment.

For the first cut for placing allotments into categories this is a judgment factor. During the AMP ranking process, B/C analysis will either back this judgment or reject it.

The break even point is $131.15 of initial investment for each AUM to be harvested on an annual basis. This is arrived at by using the following guidance.

An AUM has a value of $10.00

A return of 7-5/8% is a positive economic return.

$10.00 ÷ 0.07625 (7-5/8 in decimal form) = $131.15

Management:

If present management is bringing about static condition for an allotment near potential or will bring an allotment to near potential, it will be placed in category "M."

If present management is not doing the job but improved management would bring about improved conditions that allotment will be placed in "I" category.

If management will not improve conditions or if condition is over ridden by other considerations, place the allotment in category "C."

Additional Criteria

Size:

Allotments that have 1,280 acres or less would be placed in "C" category, unless the operator expresses a desire for an AMP and is willing to help implement that AMP. Note that often these smaller allotments can be combined with private land and made into workable systems with very little expense.

Percent BLM:

The percentage of BLM land in an allotment is a criteria only when considered with acreage of BLM. This is a judgment factor.

Land Pattern:

Land pattern like percentage of BLM must be considered with acreage. This is a judgment factor.

Other Considerations

Other considerations were important in border line cases. Some of these considerations are the desire of the user to improve management in an area, dependency of use, potential conflicts, threatened and endangered species, cultural values, etc.

Appendix A-3

METHODOLOGY FOR DETERMINATION OF RANGE IMPROVEMENT COSTS

Reservoir	$ 3,500/each
Spring Development	$ 1,550/each
Wells and Windmills	$12,000/each
Fencing	$ 1,500/mile
Burn	$ 4.00/acre
Spray	$ 8.00/acre
Seeding	$ 16.00/acre
Juniper Removal (Based on Burning)	$ 4.00/acre

Cost estimates are subject to change based on year of implementation.

Appendix B-1

CONSIDERATIONS USED IN DETERMINING LAND TENURE ADJUSTMENTS

RETENTION OF PUBLIC LANDS

Tracts or combinations of tracts of public land or interests in land that are retained in public ownership and are managed under the principles of multiple-use and sustained yield.

Considerations:

1. Well-blocked tracts of public land.

2. Tracts controlling access to other public lands (except for easements or patent reservations).

3. Manageable tracts (defined by such factors as access, resource values, compatibility with BLM objectives).

4. Areas valuable for resource programs and protection/management.

5. State and local governments' land use plans.

6. Areas not in conflict with existing planned intensive development.

Exceptions:

1. Recreation and public purpose (R&PP) applications for patents.

2. Resolution of unintentional trespass, both occupancy and agricultural.

3. Mining claims to patent.

4. Existing withdrawals.

DISPOSAL OF PUBLIC LANDS

Tracts or combinations of tracts of public land or interests in land that are suitable for conveyance out of federal ownership under existing laws and regulations.

Considerations:

1. Isolated and small land parcels.

2. Difficult and expensive to manage (no access, cost benefit low) lands.

3. Tracts not suitable for management by another federal department or agency.

4. Tracts that would serve important public objectives that could not be achieved prudently and feasibly on land other than public land which outweighed other public objectives that would be served by retaining in public ownership.

Exceptions:

1. Where fragile or unique resource values are known and the tract cannot be efficiently managed by another agency.

2. Where disposal would adversely affect management of adjacent lands by other agencies, i.e., Forest Service, State.

3. Where needs exist for R&PP leases, i.e., landfills.

4. Where access to other public lands would be cut off (easements or patent reservations might be used).

DISPOSAL OF LANDS WITHIN ALTERNATIVES

The criteria listed below was used to evaluate the disposal of public lands within the objectives of each alternative:

Alternative I - Maximized Production

Disposal:

- Isolated location and small size of lands.
- Lands difficult and uneconomic to manage (no access, cost benefit low).
- Range allotments within a "C" category that contain: (1) less than 640 acres of public land, or (2) less than 50 percent public land within fenced boundaries.

Retention:

- Small parcels where permittees are willing to fence smaller parcels into larger allotments.
- Critical habitat officially designated for species listed as threatened or endangered.

Alternative II - Balanced

Disposal:

- Isolated location and small size of lands.
- Lands difficult and uneconomic to manage (no access, cost benefit low).
- Range allotments within a "C" category that contain: (1) less than 50 percent public land within fenced boundaries.

Retention:

- Small parcels where permittees would be willing to fence smaller parcels into larger allotments.
- Critical habitat officially designated for species listed as threatened or endangered.
- Bald eagle habitat.
- Parcels included in active habitat management plans.
- Perennial streams where length was sufficient to apply management and where fisheries or recreational values were significant.
- Sage grouse strutting grounds determined to be manageable and capable of sustaining a significant population.
- Big game migration corridors, and kidding and fawning areas.
- Critical deer winter range unless habitat is receiving significant impacts by its location.
- All known National Register Sites and Districts.

Alternative III - Maximized Protection

Disposal:

- The disposal criteria remained the same as those listed in Alternative II.

Retention:

- The retention criteria remained the same as those listed in Alternative II with the exception of the following provision:

    - Retention of all parcels where wildlife values were not already jeopardized by existing developments on adjacent private lands or by their isolated location in developing private lands.

Appendix B-2

LIST OF ALLOTMENTS MEETING RANGE CRITERIA FOR LAND TENURE ADJUSTMENT

Bacon
Christopher
Cloud
Roberts Creek
Brunnemer
Fisher
Gardner (part of)
Lakeshore
Hagge
Hughes
Kelley
Perry
X-L (part of)
Prock
Sternes
Highway
Portu Reservoir
Cutoff
West Beaver Creek (part of)
Clark
Eicholy (part of)
Haury
Hitchens
Hines
Harper Hill
Reclamation
Round Valley
Barrows (part of)
Daisy Dean Spring
Piper
Roberts Reservoir (part of)
Hincraft Field
Clark's Valley
Diablo Farms
Summit Field
Williams
Brochman
Granger
McCulley
Goose Creek
Buck Mountain
Fandango
South Bidwell
Bidwell

Appendix C

LANDS DROPPED FROM DISPOSAL CONSIDERATION

The following legally described public lands have been omitted from the land disposal designation for the specific reasons given after each legal description.

MA 1

Highway Allotment (partial).

T.41N., R.12E.
Section 12: SE¼NW¼

The 40 acres are covered by an existing withdrawal.

MA 2

Outside allotment boundaries.

T.41N., R.11E.
Section 12: S½SE¼, SE¼SW¼
Section 13: NE¼NW¼, N½NE¼

A land status check revealed the parcels were privately owned.

T.41N., R.12E.
Section 7: S½SW¼
Section 18: W½SW¼

Parcels are adjacent to a completed land exchange.

MA 3

Lakeshore Allotment (all).

T.45N., R.13E.
Section 27: SW¼, SE¼NW¼, SW¼NE¼, W½SE¼, Lot 4
Section 34: NE¼NW¼, W½SW¼, SW¼NE¼, NW¼SE¼

The allotment provides valuable habitat for antelope summer and winter range, sage grouse nesting, and deer winter range.

Outside allotment boundaries.

T.43N., R.12E.
Section 22: SW¼SW¼
Section 27: W½NW¼, NW¼SW¼
Section 34: NW¼SW¼

Lands provide critical deer winter range for the interstate herd.

MA 4

Cloud Allotment (all).

T.47N., R.14E.
Section 25: E½NW¼

A land status search revealed a valid mining claim(s) cover the parcel.

Sterns Allotment (partial).

T.46N., R.14E
Section 9: NW¼SE¼

Valid existing mining claim (as above).

X-L Allotment (all).

T.43N., R.13E.
Section 13: SE¼SW¼, S½SE¼
Section 22: SE¼SE¼
Section 23: N½NE¼, NE¼NW¼, SE¼NW¼, SW¼NE¼, NE¼SW¼, NW¼SE¼
Section 24: N½N½, SE¼SW¼, E½SE¼
Section 25: SE¼NW¼
Section 26: SW¼SE¼
Section 27: SE¼NW¼
Section 32: SE¼SE¼
Section 34: SE¼NW¼

T.42N., R.13E.
Section 3: NW¼NW¼, S½NW¼
Section 4: NE¼NE¼

T.43N., R.14E.
Section 7: E½SW¼, W½SE½
Section 17: N½NW¼
Section 18: N½NE¼, NE¼NW¼, SW¼NE¼, W½SE¼, S½SW¼

All of the public lands within the X-L Allotment contain critical deer winter range, a constricted antelope migration corridor, and antelope kidding grounds for the Likely Tables herd.

Hagge Allotment (all).

T.42N., R.11E.
Section 26: W½SW¼
Section 27: SW¼NE¼, SE¼
Section 34: W½NE¼, SE¼NW¼

The parcel contains a Prairie Falcon eyrie.

MA 5

Reclamation Allotment (all).

T.39N., R.9E.
Section 2: E½SE¼
Section 11: NE¼NE¼
Section 12: NW¼NW¼

The allotment provides habitat for a sage grouse strutting ground, antelope kidding ground, summer and winter range, and deer winter range.

Barrows Allotment (all).

T.39N., R.9E.
Section 12: N½SW½

T.39N., R.10E.
Section 6: S½SE¼
Section 7: NE¼NE¼

The allotment provides habitat for an antelope kidding ground, summer and winter range, and critical deer winter range.

Roberts Reservoir Allotment (partial).

T.39N., R.7E.
Section 11: E½NW¼

The parcel provides access to a large BLM reservoir with significant recreational use.

MA 10

Diablo Allotment (partial).

T.35N., R.12E.
Section 33: SE¼, S½SW¼

The area is an antelope migration route for the Lassen herd.

Hencraft Allotment (partial).

T.36N., R.10E.
Section 28: NW¼SW¼
Section 29: S½SE¼, SE¼SW¼
Section 30: NE¼SE¼
Section 32: NE¼NW¼, N½NE¼, SE¼NE¼

The parcels provide an antelope migration corridor for the Lassen herd.

South Field Allotment (partial).

T.39N., R.13E.
Section 11: SE¼NW¼

The parcel contains archaeological values of National Register quality.

Daisy Dean Allotment (all).

T.37N., R.9E.
Section 36: NE¼NE¼, SE¼NW¼, Lots 1, 2, 4

T.37N., R.10E.
Section 31: SE¼SW¼, Lot 4

T.36N., R.9E.
Section 1: NE¼

T.36N., R.10E.
Section 6: SE¼NE¼, N½SE¼, SW¼SE¼
Section 7: NW¼, W½NE¼

The parcels contain valid mining claims.

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(June 1984)

BORROWER

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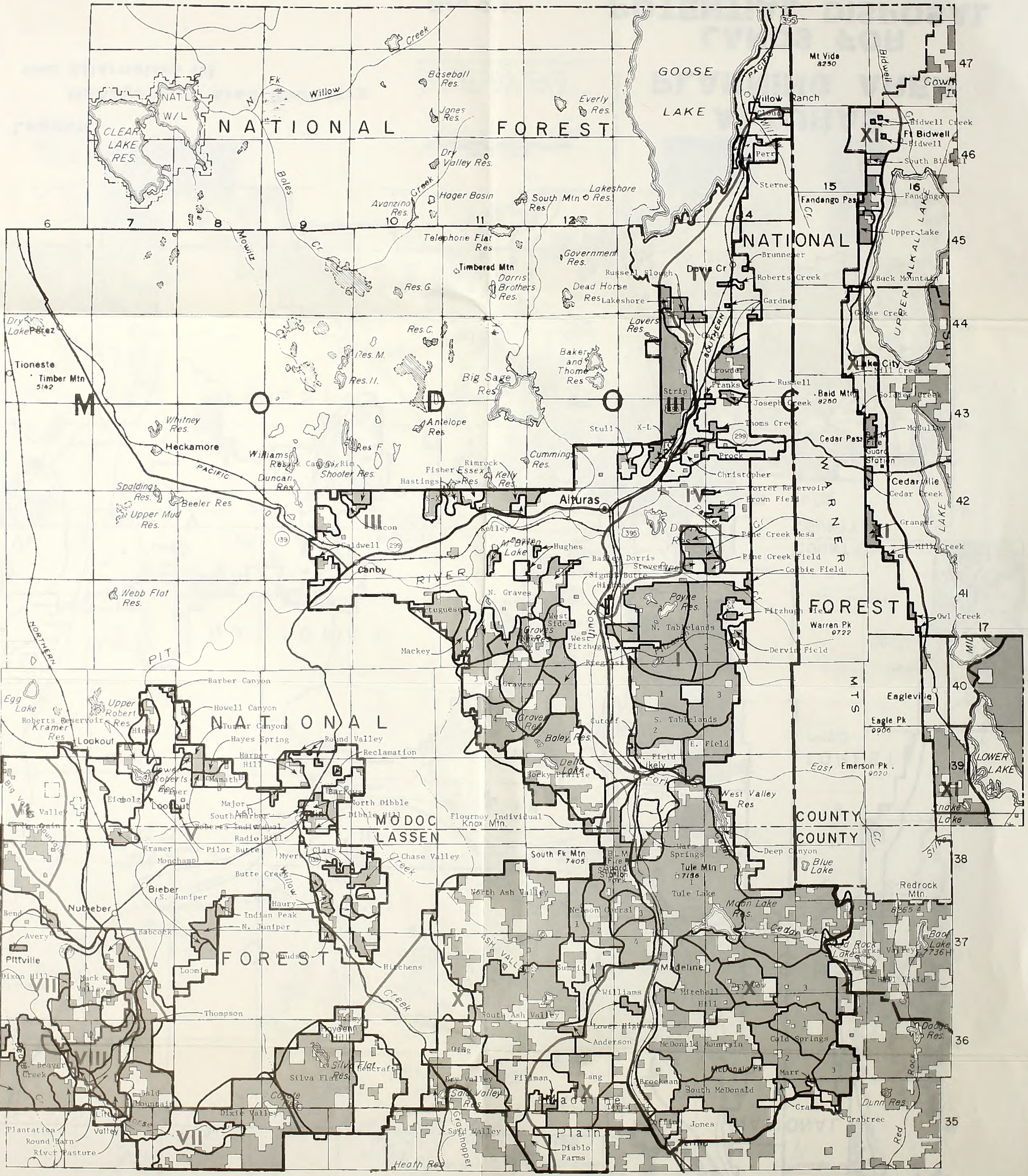
Proposed resource
plan for the Al

DATE LOANED	BORROWER

USDI – BLM


NATIONAL FOREST
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MODOC LASSEN COUNTY COUNTY
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CLEAR LAKE RES.
NAT'L W/L
Fk Willow Creek
Baseball Res.
Everly Res.
Jones Res.
Dry Valley Res.
Hager Basin
Avanzino Res.
South Mtn Res.
Lakeshore Res.
Telephone Flat Res
Timbered Mtn
Government Res.
Dorris Brothers Res.
Dead Horse Res
Lakeshore
Russell Slough
Davis Cr
Roberts Creek
Gardner
Mt Vida 8250
Willow Ranch
Perry
Sterne
Fandango Pass
Fandango
Bidwell Creek
Ft Bidwell
Bidwell
South Bidwell
Upper Lake
Buck Mountain
Goose Creek
Lake City
Mill Creek
Soldier Creek
Bald Mtn 8260
Thoms Creek
Cedar Pass
Prock
Christopher
Porter Reservoir
Brown Field
Pine Creek Mesa
Pine Creek Field
Corbie Field
Fitzhugh Field
Owl Creek
Warren Pk 9722
Eagleville
Eagle Pk 9906
East Emerson Pk. 9020
Cedarville
Cedar Creek
Granger
Milk Creek
Redrock Mtn. 8265
Boot Lake 7736
Blue Lake
Deep Canyon
Water Springs
Tule Mtn 7186
Tule Lake
Moon Lake Res.
Madeline
Clarks Valley
Dry Cow
Mitchell Hill
Cold Springs
McDonald Mountain
South McDonald
Brockman
Jones
Crabtree
Dunn Res.
Red Rock Lake
Rock Creek
Alturas
Bacon
Caldwell
Canby
Hughes
Bailey
Dorris
Stevenson
Signal Butte
Hilltop
Kelley
Modoc Lake
Cummings Res.
Fisher Essex Res
Kelly Res.
Rimrock
Hastings
Duncan Res.
Shooter Res.
Williams Res.
Black Canyon Rim
Antelope Res
Big Sage Res
Baker and Thome Res
Res. C.
Res. M.
Res. H.
Res F
Res. G.
Lovers Res.
Delta Lake
Rocky Prairie
Baley Res.
Grover Res.
Cutoff
Payne Res.
N. Tablelands
S. Tablelands
E. Field
W. Field
Likely
Strip
Crowder
Franks
Russell
Joseph Creek
Stull
X-L
Cummings Res.
Fork
West Valley Res
Flournoy Individual
Knox Mtn.
Roberts Individual
Radio Hill
Pilot Butte
Myers
Clark
Chase Valley Creek
Butte Creek
Willow
Monchamp
Kramer
Bieber
S. Juniper
Haury
Indian Peak
N. Juniper
Nubieber
Avery
Babcock
Pittville
Loomis
Hutchens Creek
Thompson
Mayden Hill
Silva Flat Res.
Hendrafter
Coyote Res.
Dixie Valley
Bald Mountain
Little Horse
Valley
Plantation
Round Barn
River Pasture
Beaver Creek
S. Beaver Creek
Egg Lake
Roberts Reservoirs
Upper Robert Res
Kramer Res
Lookout
Howell Canyon
Turner Canyon
Hayes Spring
Harper Hill
Round Valley
Reclamation
Lower Roberts Res
Piper
Mamath
Barrows
North Dibble
Dibble Hill
Major Ash
South Harber
Eicholz
Lookout
Big Valley
Big Valley Mountain
Timber Mtn 5142
Dry Lake Perez
Tioneste
Whitney Res.
Heckamore
Spalding Res.
Beeler Res
Upper Mud Res.
Webb Flat Res.
Barber Canyon
Mackey
N. Graves
Portuguese
West Side
Graves Res.
Cutoff
Baley Res.
Delta Lake
Rocky Prairie
Payne Res.
N. Tablelands
S. Tablelands
E. Field
W. Field
Likely
Fitzhugh Field
Dervin Field
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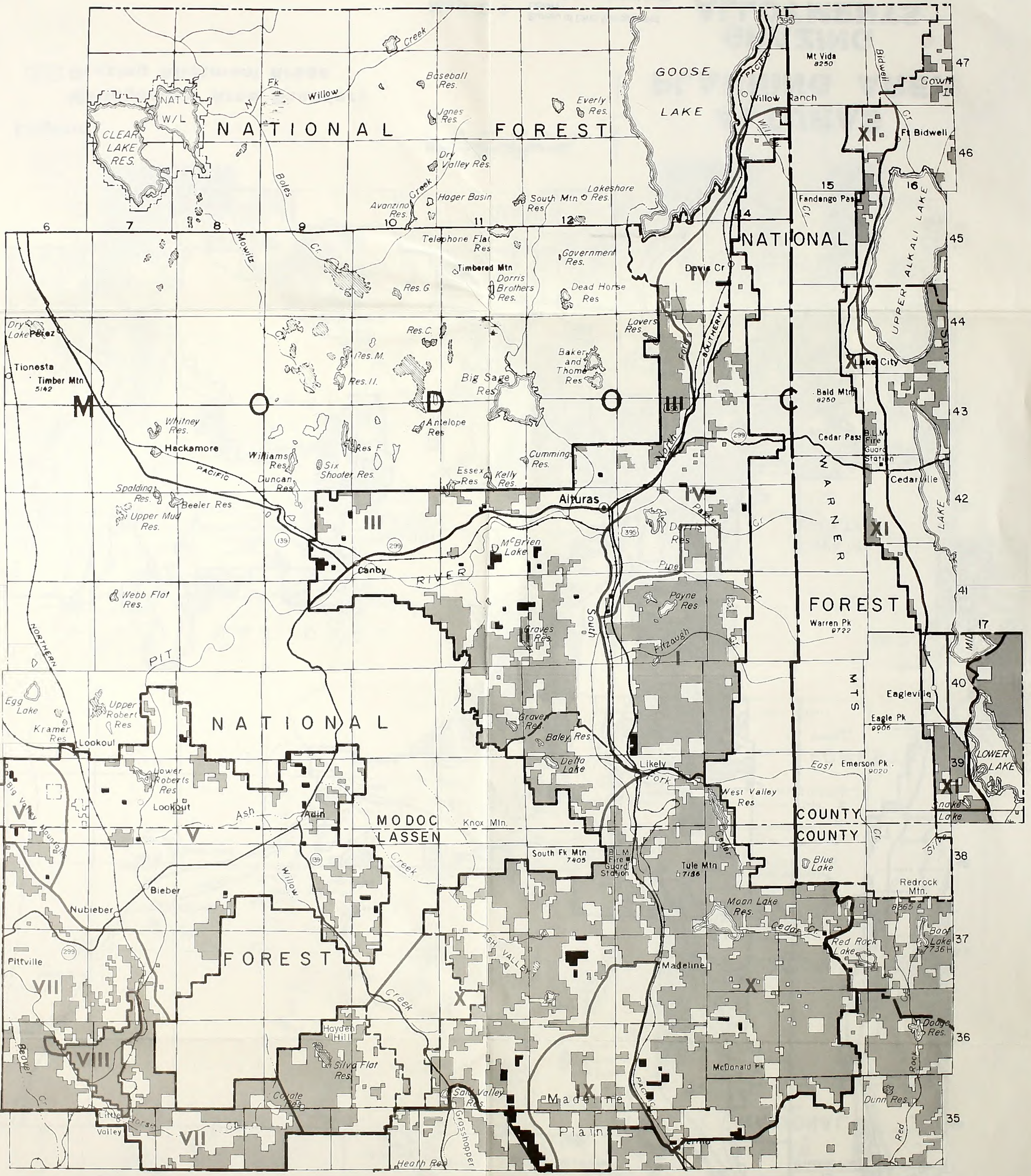
Sand Valley
Grasshopper
Heath Res



Legend

Management Area Boundary

Alternative III

Graphic Scale

0 2mi. 4mi. 6mi. 8mi. 10mi.

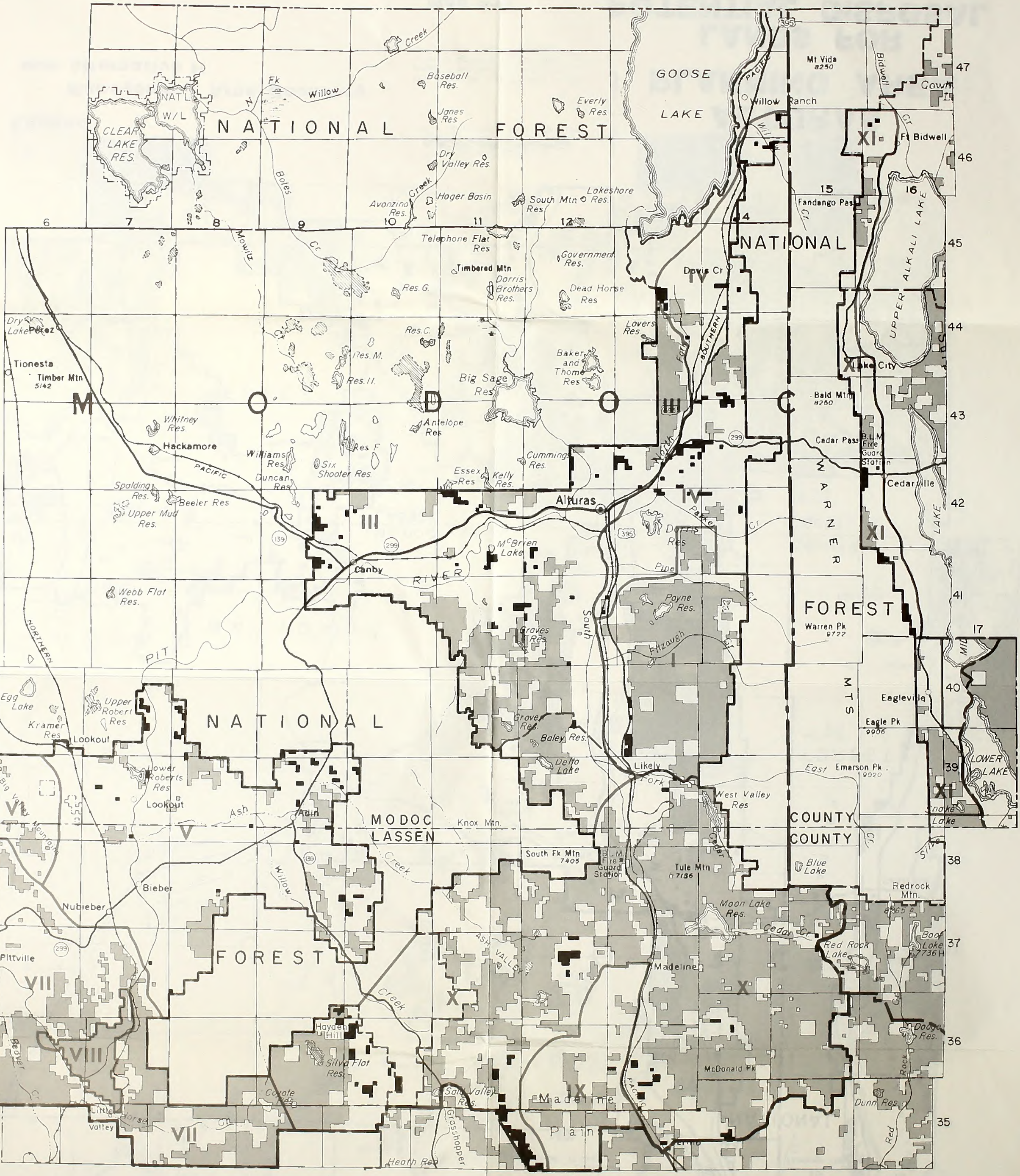
-N-

This map shows land disposal as proposed in the Draft Alternatives. Refer to Appendix "C" for lands dropped from disposal consideration.

Map 3-10

ALTURAS PLANNING AREA

LANDS FOR POTENTIAL DISPOSAL



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Management Area Boundary

Alternative I

Grophic Scale

0 2mi. 4mi. 6mi. 8mi. 10mi.

N

This map shows land disposal as proposed in the Draft Alternatives. Refer to Appendix "C" for lands dropped from disposal consideration.

Map 3-8

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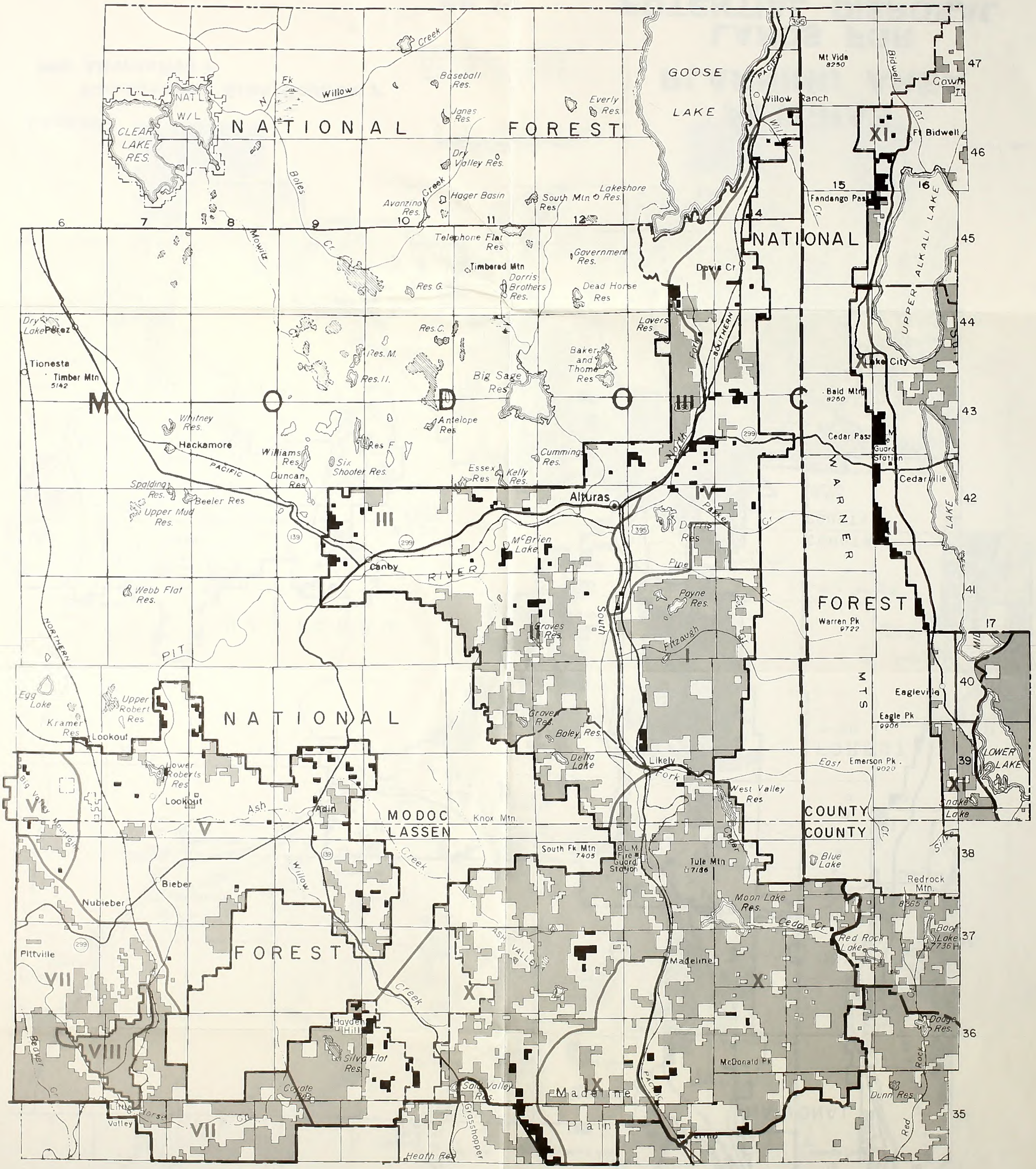
ALTURAS PLANNING AREA

LANDS FOR POTENTIAL DISPOSAL



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Management Area Boundary

Alternative II

Graphic Scale

0 2mi. 4mi. 6mi. 8mi. 10mi.

This map shows land disposal as proposed in the Draft Alternatives. Refer to Appendix "C" for lands dropped from disposal consideration.

N

ALTURAS PLANNING AREA

LANDS FOR POTENTIAL DISPOSAL

Map 3-9